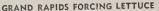
## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.







Washington Strain

Original Washington strain. This is our own selection, and constant supervision and selection makes this strain an outstanding variety for greenhoure forcing. Color a light green; heads very heavy; leaf crisp, tender and curly; quality of the best. Complete description will be found on page 15. Price, ox., 25c; 1/4 lb., 70c; 1 lb., \$2.25, postpaid.





#### GRAND RAPIDS FORCING TOMATO

New. Improved. Select Growers strain. It's new and improved and is one of the best forcing Tomatoes on the market today. Full description will be found on page 26. Price, ox., 50c; ½ lb., \$2.00; ½ lb., \$3.50,

# Forcing Varieties

The Grand Rapids Forcing varieties listed on this page have their origin in Grand Rapids, from whence they derive their name, and are the most dependable seeds for greenhouse crops. They are used in all parts of the country by the best and largest growers in the business. Many of the state colleges will recommend their superiority as well as agricultural journals and national magazines.

If you are not familiar with these varieties, give us a trial order and get acquainted with their merits. We have appreciated a nice business on our forcing varieties and an order from

you will be filled on the same day received.

## GRAND RAPIDS FORCING RADISH GRAND RAPIDS FORCING CUCUMBER Improved strain New. A white spine selection, medium sized with blunt end, New Improved. The best sized with blunt end, averaging 10 to 12 inches in length. An ideal forcing variety. Full description will be found on page 13. Price, oz., \$1.25; 1/4 lb., \$3.50; 1 lb., \$12.00, postpaid. greenhouse variety and the earliest of the Scarlet the earliest of the Scarlet Globe type, and superior in every way for greenhouse forcing. With the shortest top. Full description will be found on page 22. Price, oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, resterid 1/4 lb., 3 postpaid.

## 1944

PLEASE USE THIS ORDER SHEET

# GRAND RAPIDS GROWERS, Inc. Grand Rapids, Michigan

NAME		Write very plainly.	19										
Street, P.	O. Box	State											
	Express or Freight Office (If Different from P. O.) Forward Goods by (Parcel Post, Express												
	UNT ENC	DISCOUNTS	10%										
proved to you		If Your Order Amounts to 51.00 or More. Except on Peas, Beans and Co	orn If Your Order Amounts to \$5.00 or More.										
		THIS DISCOUNT APPLIES ON SEED ORDERS	ONLY.										
		ALL OTHER ITEMS ARE NET CASH AS QUO MONEY MUST ACCOMPANY ALL ORDERS.											
Cash	\$	DISCOUNTS DO NOT APPLY ON CANADIA											
More Order Blanks will be sent upon request. Always write letters on a separate sheet from your order.  Make Money Orders or Checks payable to Grand Rapids Growers, Inc.													
GRAND RAPIDS GROWERS, Inc. Aims to give high quality in all seeds they sell, but can give express or implied, as to description, purity, productiveness, and be responsible for the crop; if the purchaser does not accept the goods on these terms, they are to be returned. In ort guarantee full delivery on future orders as the supply is contingent on factors over which they have no corresponding, fire, etc.													
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# Grand Rapids Growers, Inc.

Twenty-Fourth Annual Seed Catalog

## 1944

## **Important**

By Carefully Following These Suggestions, Many Mistakes Will Be Avoided

#### Order Blanks

Order blanks have been inserted in this catalog for Order blanks have been inserted in this catalog for your convenience. Please use them. Fill in your NAME, POST OFFICE, SHIPPING POINT or nearest EXPRESS OFFICE, your COUNTY and STATE, as this is as important in the prompt filling of your order as the order itself. Write plainly and avoid mistakes. Additional order blanks are mailed with every order. If you do not receive them, please notify us, and we will be glad to furnish them.

#### Terms

Our terms are strictly cash and we ask that you enclose your remittance with order. On all vege-tables and flower seeds EXCEPT peas, beans, and sweet corn, you may deduct 5% as your savings if your order amounts to \$1.00 or more and 10% on all orders amounting to \$5.00 or more. offer does not apply on special offer collections, bulbs or plants.

This offer is good only in the U. S. A. and your remittance must accompany your order to entitle you to the discount. While we do not think there will be any serious changes, all prices quoted herein are made subject to change without notice.

#### How to Send Money

Remittance should be made by POSTAL MONEY ORDER, EXPRESS MONEY ORDER, BANK DRAFT or CERTIFIED CHECK. It is perfectly safe and your order will be assured of prompt handling. U. S. CURRENCY and U. S. POSTAGE STAMPS for small amounts, are acceptable but in this case the letter should be REGISTERED.

#### Canadian Customers (Notice)

We are very thankful for the business you have given us in the past and we will continue to give you our very best of service and quality seeds.

Please take special notice that we cannot make C. O. D. shipments to any part of Canada and cannot pay postage on any items of seed in this catalog above

the pound rate.

We also ask that you make your remittance in United States funds as the discount on Canadian paper is far in excess of where it was and will not permit us to honor same at face value. You can, however, we have the property of the propert ever, obtain a bank draft or money order payable in U. S. funds and will ask that you consult your banker or postmaster. Personal checks or currency are not acceptable.

#### Non-Warranty

The seeds offered in this catalog have been carefully grown, selected, cleaned and tested for germination and we believe them to be first-class, but as so more ronditions enter into making a crop, we give no warranty, either express or implied, as to description, purity or productiveness, and will not be responsible for the crop. If the purchaser does not accept the goods on these terms, they are to be returned at once, and the money will be refunded.

#### Small Orders

Small orders are just as welcome as the larger ones and receive the same careful attention and prompt handling. All orders are filled the same day as re-

#### Large Quantities

Parties buying large quantities of any one variety of seeds will be quoted special prices on application.

#### Price of Seeds By Weight

We will supply HALF POUNDS and over at the pound rate; less than half pound lots are charged at the quarter pound and ounce rate.

#### Safe Delivery

All seeds and supplies sent out by us are fully insured and we guarantee their safe arrival. If there is any damage, notify us immediately.

#### Postpaid Prices (Important)

We prepay postage on all vegetable and flower seeds in packets, ounces, quarter pounds, half pounds and pounds at the prices quoted herein to any point of the United States or any of its possessions, and Canada; however, we do not pay postage on beans, corn, or peas beyond the "one pound" price; field seeds, onion sets, miscellaneous supplies, or anything that is not specifically listed "postpaid." If such items are wanted by parcel post, add sufficient postage as per Parcel Post Rates given below.

#### Air Mail

On RUSH ORDERS received by mail or wire for one ounce or more of seed, we will send by air mail if so requested at a nominal charge of 6c PER OUNCE of seed ordered, as the postal rate is 6c for EACH ounce. One ounce of seed would weigh more than one ounce when it is packed ready to mail. Where the mailing weight is less than one ounce, we will pay the postage. This will give you overnight service to almost any point in the United States.

#### Weight Limit

The weight limit is now 70 lbs. anywhere in the United States, and we advise sending seeds by mail as the service is good; however, on shipments of 20 lbs. and over it is cheaper to send by express, beyond the third zone.

Parcel Post Rates	1st lb. or Frac-	
1st Zone, within 50 miles of Grand Rapids.	tion	Fraction 1.1c
2nd Zone, within 150 miles of Grand Rapids.		1.1c
3rd Zone, within 300 miles of Grand Rapids.	9c	2c
4th Zone, within 600 miles of Grand Rapids.	10c	3.5c
5th Zone, within 1000 miles of Grand Dapids.	11c	5.3c
6th Zone, within 1400 miles of Grand Rapids.	12c	7 c
7th Zone, within 1800 miles of Grand Rapids.	14c	9c
8th Zone, over 1800 miles from Grand Rapids	15c	11c
Canada, all parts	14c	14c
If in doubt obtain your zone rate from y	our postn	aster.

## Grand Rapids Growers, Inc.

Seed Merchants

Cor. Wealthy and Ionia Ave., S.W. Phone 97216. Grand Rapids, Mich.

Asparagus
CULTURAL DIRECTIONS. One-half ounce of seed will sow 50 feet of drill and produce about 500 plants. Drill the seed in rows about 24 inches apart, covering seed 1 inch. Cultivate well, keep free from 24 inches apart, covering seed 1 inch. Cultivate well, keep free from weeds and they should be all right to transplant to peramaent beds the following spring. An application of a good commercial fertilizer in the spring is recommended to avoid weed seeds in barnyard manure and an application of phosphate and potash after the cutting period. Do not cut until the third year, limit cutting to the middle of June. Every fall before the seed is ripe, cut tops and burn them. Remember, the bed well planted will last for at least 20 years, treat it well.

★Mary Washington Rust-Resistant Asparagus and most tender green Asparagus. This is a decided improvement due to the untiring efforts of Prof. J. B. Norton, member of the Plant Breeding Staff of the U. S. Dept. of Agriculture. Oz., 15c; ¼ lb.,

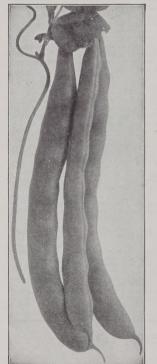
Breeding Staff of the U. S. Dept. of Agriculture. Oz., 15c; ¼ lb., 35c; 1 lb., \$1.15, postpaid.

Paradise New. Early maturity, heavy producer and fine qualthe stems are just as large and just as green, but here it ceases, as Paradise is much milder, and will produce a crop the second year from seed. Remarkable results have been obtained, and it is recommended for the home garden as well as the market gardener. Oz., 40c; ¼ lb., \$1.20; 1 lb., \$4.00, postpaid postpaid.

Palmetto green shoots, distinctly pointed at the tip. A popular canning variety. Oz., 10c; ¾ 1b., 30c; 1 lb., \$1.00, postpaid.

Asparagus Roots
We have the Palmetto and Mary Washington Rust-Resistant
Asparagus Roots, every spring, and as we only handle the very
best two-year roots, that are locally grown, we will ask that you write us for prices in whatever quantity you may want.

## Beans



CULTURAL DIRECTIONS. One pound to 100 feet of drill; about three-fourths bushel per

about three-tourths bushel per acre of Bush Beans. Beans thrive on a rich, warm, light soil. It is not safe to plant until about the middle of May as the seed will rot in cold, wet ground, and plants will not stand frost. Plant dwarf beans in rows 2 feet apart and from 4 to 6 inches apart in the rows. Lima Beans should not be planted until June first, when the soil is thoroughly warmed through. Limas will rot in cold ground.

#### Wax Podded Varieties

- ★ Pencil Pod Black Wax 52 days. Pods are round, very long, tender, and market gardeners' sort. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.
- ★ Unrivaled Wax Beans 53 days. Small plant, very early and great yielder. Pods about 5½ inches long. Somewhat curved, semi-flat, fleshy and very tender and stringless. Color pale yellow. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

Improved Golden Wax 48 days. One of the earliest dwarf wax sorts. Pods flat, long, golden yellow, tender, stringless. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00

Webber Wax (Cracker Jack). 48 days. Extremely early and productive.

1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

#### **Green Podded Varieties**

- ★ Landreth Stringless Green Pod 53 days. An improvement of Burpee's Stringless Green Pod. Vine is more erect, with darker foliage and a longer, slimmer pod. Pods 6 to 8 inches long, slightly curved, meaty, and absolutely stringless. Undoubtedly the best round-podded bean on the market today. Very prolific and an ideal variety for the home garden, market gardeners and canners. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.
- ★ Tendergreen 54 days. A new introduction, and now one of the most popular green beans. Hardy; dependable cropper, medium large, dark green and stringless. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.
- ★ Giant Stringless Green Pod 53 days. Similar to Landreth Stringless but slender, more depressed between beans and slightly lighter in color; early, hardy and of highest quality. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

Langreth Stringless Green Pod All prices quoted herein are subject to available stocks on hand and subject to change without notice.

#### Green Podded Varieties—Cont.

Bountiful 48 days. Best of the flat-podded varieties. Pods 6½ to 7 inches long, thick, flat and slightly curved. Stringless and of fine quality, color light green. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

Plentiful (50 days.) Very desirable for shipping or for the home and market plentiful garden. It is a green flat-podded bush bean, an improved, very productive variety of the Bountiful type. Long straight, medium deep green pods, brittle, stringless and of a distinctive flavor. Notably resistant to common rust. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

Refugee or 1000 to 170 days. A very productive, hardy, vigorous late sort. Pods 5 to 5½ inches long, somewhat slender, round and slightly curved, almost stringless and of good quality; color light green. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

Kentucky Wonder or Old Homestead 65 days. The most popular green-podded Pods 8 to 9 inches long, very slender. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

Dutch Case Knife inches long, straight, flat, brittle, of good quality; best as a shell bean. Beans very flat, ivory-white. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

#### Lima Beans Pole Varieties

King of the Garden Lima 88 days. An improved strain, vigorous, midseason, wide, and uniformly four-seeded. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

Early Jersey Pole Lima (Sieberts). 80 days. An early midseason variety. Very productive and highest quality. Pods 5 to 6 inches long; beans rather thicker than the King of the Garden, but of the same type. 1 lb., 55c, postpaid. Not prepaid, 10 lbs., \$5.00; 25 lbs., \$11.50; 50 lbs.,

#### **Dwarf or Bush Varieties**

(All-America Selection.) 72 days. A prolific bush Lima orig-Baby Potato Lima inated as a field cross between Henderson's Bush Lima and one of the potato Lima types. The seeds are small but thick, of bright green color when fresh, and similar in flavor to Fordhook. Adapted not only for produce market, but also for canning and quick freezing. I lb., 55c, postpaid. Not prepaid, 10 lbs., \$5.00; 25 lbs., \$11.50; 50 lbs., \$22.50.

Burpee's Improved Bush Lima

75 days. Both beans and pods are larger than the old type. The pods measure 5 to 6 inches long by 1½ inches wide and are of a luscious flavor. They are frequently borne in clusters of from 5 to 8 pods. 1 lb., 55c, postpaid. Not prepaid, 10 lbs., \$5.00; 25 lbs., \$11.50; 50 lbs.,

★Fordhook Bush Lima 75 days. A most excellent variety and exceedingly popular with market gardeners. Pods are about 5 inches long, containing 4 to 5 large, oval-shaped, very thick, white beans. I lb., 55c, postpaid. Not prepaid, 10 lbs., \$5.00; 25 lbs., \$11.50; 50 lbs., \$22.50.

Burpee's Improved Bush Lima

★Henderson Bush Lima (Baby Lima). 65 days. A vigorous, hardy, very early and small type of Bush Lima. Pods small, about 3 inches long, containing 3 to 4 small, fat, white beans. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

## Beets

CULTURAL DIRECTIONS. One ounce to 50 feet of drill; 6 to 8 pounds per acre. Beets prefer a well-prepared friable soil planted from ½, inch deep, according to the texture of soil. For an early worked in the spring, When plants are large enough to use as great worked in the spring. When plants are large enough to use as great, thin to 3 inches apart in the row. Beets can be sown as late as July for main crop. Hen manure is recommended as a fertilizer in the rows; care being used that the seed does not come in immediate contact with the fertilizer. the fertilizer.

★ Early Wonder 55 days. An early variety. It is turnip-shaped and is always smooth. The flesh is a

beautiful deep red color and is of excellent quality. Tops are small and erect. Exceptionally good for early bunching. Oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.

\*\*Detroit Dark Red dark red; flesh solid vermilion-red. Tops small, upright, dark green, shaded red. Oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.

Detroit Dark (Morse's Strain)

All prices quoted herein are subject to available stocks on hand and subject to change without notice.

#### **BEETS-Continued**

58 days. Where an early market sort is Crosby's Egyptian 58 days. Where an early market sort is desired, our strain is unequalled. Roots a flattened globe shape, skin very dark red, flesh a trifle lighter, tops small. Oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.

Eclipse dium sized, round, clear red roots; flesh bright red. Oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.

Early Blood Turnip, Improved dable Beet. Roots nearly round Carly Dibout lump, improved table Beet. Roots hearly about or slightly flattened, bright red, zoned and of good quality. Not so early as Detroit, but with a larger, coarser top. Oz., 30c; ½ lb., 95c; 1 lb., \$3.00, postpaid.

Green Top Bunching

60 days. Early, extremely attractive bunching beet. Tops medium sized bunching beet.

and erect. Foliage clean, grayish green that does not turn red or brown in the fall. Roots round, smooth and glossy, flesh bright blood-red. Mostly grown for beet greens. Oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.

Mangel or Stock Beets
CULTURAL DIRECTIONS. One ounce to fifty feet
of drill, five pounds per acre. Sow early in the spring, in rows about two feet apart; cover seed one and onehalf inches deep, pressing the ground firmly over the seed. When plants are three inches high thin to about eight inches apart in the row. The plants pulled may be used for greens.

Mammoth Long Red 120-150 days, A favorite with the dairyman and farmer. Large,

well-formed; dark red color, very nutritious; a big cropper. Oz., 25c; ¼ lb., 75c; 1 lb., \$2.00, postpaid.

Golden Tankard sweet; tops and neck very small; flesh yellow; especially relished by cows and sheep. Oz., 25c; ¼ lb., 75c; 1 lb., \$2.00, postpaid.

Sugar Beets

Sugar Beets and Mangels are of great value for stock feeding, because of the improved health and condition of the animals, increased flow and quality of milk, and because of the saving in fodder. The yield is enormous, and the cost of growing is trifling. Grow a patch of them for winter feed. They are also excellent for poultry.

Giant Feeding Sugar 120-150 days. A most valuable, large yielding variety for feeding: 120-150 days. A most valuable, large yielding variety for feeding Sugar 120-150 days.

ing; half sugar, oval-shaped, skin rose colored, flesh white, very nutritious and easily harvested. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.



Danish Ballhead



Italian Green Sprouting Broccoli

#### Broccoli

A frequent application of Nitrate of Soda can be of great value to promote the life of this crop.

Italian Green Sprouting 75 days. This variety produces a large head, like cauliflower, consisting of a compact cluster of bluish green flowers. When the central head is removed, the plant produces many branches, each bearing small heads. These are cut with 3 or 4 inches of the branch as well as the flower heads are cooked and served as cauliflower. Oz., 40c; ½ lb., \$1.25; 1 lb., \$4.00, postnaid.

## Cabbage

CULTURAL DIRECTIONS. One ounce will produce about 2,000 plants; 10,890 plants will plant an acre of early cabbage; and 7,260 plants for an acre of late. Three ounces of seed will plant an acre of early and five ounces an acre of late cabbage. For early cabheedlesh
about two feet apart each way. For late cabbage, For early cablesh
about two feet apart each way. For late cabbage, sow
seed in the open ground in May and transplant about
July first in rows 2½ feet each way.
In fertilizing, we recommend hen manure at the rate of
one handful to three feet in the furrow. Care must be used
so that the roots do not come in direct context with the

so that the roots do not come in direct contact with the

manure.

Early Varieties

\*\*Golden Acre 64 days. Heads round, very hard. Matures two or three weeks earlier than Copenhagen Market, but is otherwise quite similar. Owing to earliness and remarkable uniformity, Golden Acre will prove the most profitable early cabbage for market gardeners. Oz., 65c; ¼ lb., \$2.05; 1 lb., \$7.50, postpaid.

Early Jersey Wakefield 62 days. Market gardeners in genriety. The conical heads are very uniform in shape and very solid. Our stock is dwarf, compact and extremely early. Oz., 65c; ¼ lb., \$2.05; 1 lb., \$7.50, postpaid.

Improved Copenhagen Market 65 days. Nearly as early as short, heads large, round and solid, with few outer leaves. Oz., 65c; ¼ lb., \$2.05; 1 lb., \$7.50, postpaid.

Green Acre 66 days. A comparatively new strain with the general characteristics of Golden Acre, but

holds its green color longer and is thus of added value to market gardeners and shippers. Oz., 65c; ¼ lb., \$2.05; 1 lb., \$7.50, postpaid.



Golden Acre Cabbage

## Late Varieties

★ Danish Ballhead 95 days. Short-stemmed, heads round, very solid and heavy. Splendid keeepr, hardy, and the best winter sort. Oz., 65c; ¼ lb., \$2.20; 1 lb., \$7.75, postpaid.

Premium Flat Dutch fine quality. Heads very solid, broad, round, flattened on top, fine grained and tender. Oz., 65c; ¼ lb., \$2.20; 1 lb., \$7.75, postpaid.

Glory of Enkhuizen 76 days. Excellent medium early, round. A very long keeping variety. Oz., 65c; ¼ lb., \$2.20; 1 lb., \$7.75, postpaid.

American Savoy (Chieftain). 85 days. Large, flattish the best Savoys. Oz., 65c; ½ lb., \$2.20; 1 lb., \$7.75, postpaid.

Mammoth Rock Red 90 days. Heads solid, of good size and quality. Oz., 65c; 1/4 lb., \$2.20; 1 lb., \$7.75, postpaid.

#### YELLOWS-DISEASE-RESISTANT VARIETIES

★ Yellows Resistant Golden Acre 62 days. This strain can be grown successcut just as early as the standard variety, and has a similar yield. But under abnormal conditions and backward weather, it has a tendency to bolt readily and the regular strain is recommended. Oz., 65c; ¼ lb., \$2.20; 1 lb., \$7.75, postpaid.

★ Wisconsin Hollander No. 8 (Yellows-resistant). 90-100 days. A heavy yieldlows. Round head, and yields greater tonnage than the ordinary strains. Oz., 65c; ¼ lb., \$2.20; 1 lb., \$7.75, postpaid.

★ Marion Market 75 days. A yellows-resistant strain of Copenhagen Market. Round head and crisp tenderness of the parent cabbage. Principally adapted on yellows infested soils where non-resistant strains fail completely. Oz., 65c; ¼ lb., \$2.20; 1 lb., \$7.75, postpaid.

Globe 80 days. Yellows-resistant strain of Glory of Enkhuizen. A valuable replacement for the older variety where the soil is sick. Oz., 65c; ½ lb., \$2.20; 1 lb., \$7.75, postpaid.

#### **Brussels Sprouts**

The culture is the same as for cabbage which it resembles, the edible part being the small heads, an inch or two in diameter that form at each leaf joint all the way up the stalk. The leaves should be broken off in the fall to give more room for the little heads to grow. Delicious and more tender than any cabbage. 90 days. Half-dwarf. Oz., \$1.00; ¼ lb., \$3.50; 1 lb., \$12.00, postpaid.

## Celery Cabbage or Chihili

CULTURAL DIRECTIONS. One ounce will produce 2000 plants. Do not sow seed till the last of May, earlier sowing generally going to seed instead of making heads. Seed may be sown in seed beds and transplanted in rows three feet apart and about fifteen inches apart in the row, or may be sown in rows and thinned.

★ Chibili 70 days. It has a delicate cabbage flavor, much milder than cabbage. The heads are long, about 16 inches, rather slim, coming to a point at the top. Color a very thick hard bluish green, with the inner leaves and stalks blanched to a beautiful snow-white. Write for prices.

#### **Swiss Chard**

CULTURAL DIRECTIONS. One ounce to fifty feet of drill; five pounds per acre. Sow early in the spring, in rows eighteen inches apart and thin to one foot apart. The plants are of very rank growth, and will continue to grow and produce all summer and if given a little protection during the winter, will produce early greens in the spring.

Lucullus 55 days. Leaves large and curly. Plant grows about 2 feet high, midribs are very broad and are a good substitute for asparagus during the summer months. Oz., 20c; ¼ 1b., 80c; 1 lb., \$2.50, postpaid.

New Rhubarb A Chard of unique crimson color. Stalks sweet and succulent. Bright red in color; leaves green to bronze, heavily veined with red. Plants are vigorous and will yield a tremendous crop throughout the summer and fall, until killed by frost. Very limited supply; intended for trial purposes only. 50 seeds, 15c; 100 seeds, 25c; 200 seeds, 45c; ½ oz., \$1.00, postpaid.



Chihili Celery Cabbage

# **CELERY**—Choice

CULTURAL DIRECTIONS. One ounce will produce from 5,000 to 10,000 plants; two ounces per acre. Muck soil is best for Celery, but good Celery may be grown on rich, loamy soil if water can be applied freely. Celery needs manure and fertilizer, but as muck soils are usually well supplied with an abundance of nitrogenous matter, a fertilizer high in phosphate and potash usually gives the best results.

#### YELLOW VARIETIES

New Golden Self Blanching 85 days. New type. Grown from the celebrated "Vilmorin" French strain. It has a long stalk and is commonly called "TALL STRAIN." It makes a magnificent growth of tall, broad, flat stalks of a lighter shade of yellow. The leading variety grown today, and it can be grown for either an early or late crop, as it bleaches very easily in either boards or dirt, and is superior for storage and trenching, for its long keeping qualities. Oz., \$1.00; ½ lb., \$3.50; 1 lb., \$12.00, postpaid.

Golden Plume (Special.) 85 days. Similar in many respects to the old Simon's Golden Plume. It is an improved strain. Retains earliness and ease of blanching. Heavy producer. Normally 24 to 26 inches tall with stems 7½ to 8½ inches and a full heart. Oz., \$1.25; ½ lb., \$4.00; 1 lb., \$15.00.

Superplume (Dwarf.) 80 days. In appearance it belongs to the dwarf Golden Plume type, but has thicker, longer meatier stems of better quality. Edible portion of stem 7 to 9 inches to the first joint. Texture remarkably good, very firm, yet crisp. Blanches easily to an attractive, light green. Oz., \$1.00; ½ lb., \$3.50; 1 lb., 12.00, postpaid.

Growers Wonderful 80 days. A valuable to the Golden Plume. The plants are semi-dwarf, very vigorous and have a very full heart which bleaches quickly to a golden yellow color. An excellent sort for market gardeners. Oz., \$1.00; ½ lb., \$3.50; 1 lb., \$12.00.

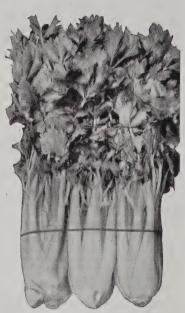
Kilgore's Pride 105 days. A very early marketing variety, ribbed, 8 to 10 inches to the first joint and averaging 25 inches over all, making the tops come well over the top of the crate. Heavy heart and a very heavy yielder. This variety is similar to our New Golden (with heavier stalk). Oz., \$1.75; ½ lb., \$6.00; 1 lb., \$22.00, postpaid.

New Golden Self-Blanching Celery

Improved Dwarf Golden 90 days. A self-blanching dwarf cellold Golden so popular several years ago. It retains all of the excellent qualities of the parent strain and its growing habits make it an ideal celery for shipping in squares or hearts. Oz., \$1.00; ½ lb., \$3.00; 1 lb., \$10.00, postpaid.

Florida Golden 85 days. Preferred by commercial growers in serious as it is highly resistant to this soil-borne disease. Highly productive, 22 to 25 inches tall, compact, very full hearted, with edible stems 7½ to 9 inches long. Blanches readily under paper or boards. Excellent quality. Oz., \$1.00; ¼ lb., \$3.50; 1 lb., \$12.00, postpaid.

Cornell No. 19 100 days. An early, easy blanching strain of outstanding quality, described as a cross between the Self Blanching and the Utah. 10½-11 inches to joint with an overall length of 24 to 25 inches. Hearts long and comparatively full. Stems thick, rounded and of smooth texture. Combines the good qualities of the Pascal type and is highly resistant to fusarium yellows. Oz., \$1.75; ½ lb., \$6.50; 1 lb., \$21.00, postpaid.



Jersey Golden Plume Celery

Jersey Golden Plume (Taller Strain). An grower that blanches quickly. It has that full plumed center, so much desired by the trade. It is uniform, solid and shows less tendency to blight or crown rot, than any other strain we know of. On account of the great care taken in selecting and rogueing we know there is none better. The ribs are from 7 to 8 inches to the first joint, according to growing conditions and the height is about 26 to 28 inches. Sold out.

#### SUPPLIES FOR CELERY GROWERS

Due to irregular conditions beyond our control, and the shortage of available supplies, our stock is not always complete.

Celery tapes, 17 and 21 strand. Celery braids, 13, 17, 21 and 25 strand. Hard and soft twist string in 6 and 8 ply for hand tying.

This may change from time to time and we would welcome your inquiries.

We also handle celery fungicides, insecticides and fertilizers. The supply is limited, but we would appreciate an opportunity to quote you on your requirements.

## Market Garden Varieties

GREEN VARIETIES

#### THE BEST GREEN CELERY

★ Grower's Earligreen The finest, earliest green celery we know. Vigorous prisingly large for an early sort. The outer leaves are green and the very full heart is pure white, brittle and of the most delicious flavor. In our trials this past season this proved to be an outstanding variety in all details. It is the best green celery on the market today, and should be in heavy demand this year. Oz., \$2.00; ¼ lb., \$7.00; lb., \$25.00, postpaid.

California Pascal A green midseason celery. Easy to blanch. Height 26 to 28 inches, stems 9 to 10 inches long. Very heavy, rounded with narrow channel, slightly tapered. Stems numerous, forming a compact head. This is the strain that is proving successful in many of the larger markets. Oz., \$1.50; 14 lb., \$5.50; 1 lb., \$20.00, postpaid.

Paragon A Celery of exceptional merit. The plant is dwarf, vigorous, quite hardy, and has a very full heart. Stalks broad, quite thick, very solid, crisp and tender, bleaching readily to a golden yellow color. Highly recommended for an early or late crop. Oz., \$2.00; ¼ lb., \$6.50; 1 lb., \$24.00, postpaid.

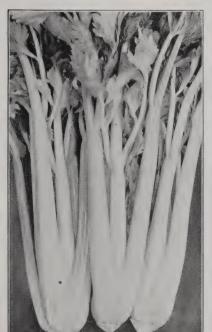
Growers Epicure An early green celery. Height 22 to 28 inches. Tops medium cylindrical. Edible stems 8 to 10 inches to first joint. Hearts full. Oz., \$1.50; 1/4 lb., \$5.50; 1 lb., \$20.00, postpaid.

Fullheart 100 days. Produces shorter and more stocky plant than the Easy Blanch-heart formation which it is evidently a selection. Especially good for heart formation which blanches readily. Recommended for early storage and hearts. Oz., \$1.00; ½ lb., \$3.50; lb., \$12.00, postpaid.

Pride of the Market A dwarf, thick-stalked variety, vigorous grower, not easily Our seed is grown by the originator. Oz., \$1.50; ½ lb., \$5.00; 1 lb., \$18.00, postpaid.



Growers Enicure



Growers Earligreen

★ Utah Jumbo Winter A late celery of the finest quality. Very free from strings, and bleaches to a pure white, nutty and crisp. Oz., \$1.35; ½ lb., \$4.00; 1 lb., \$14.00, postpaid.

Giant Pascal 140 days. A tall late green celery of excelsolid. Oz., 35c; 14 lb., \$1.25; lb., \$4.00, postpaid.

\* Fordhook Emperor Quite dwarf and stocky with large, full, light yellow heart. Stalks broad, thick and crisp. Very tender and brittle. Oz., 35c; ¼ lb., \$1.25; lb., \$4.00, postpaid.

Winter Queen Oz., 35c; 1/4 lb., \$4.00, postpaid.

#### New Growers Green

A superior strain of a green Celery, having the characteristics of the Newark Market but greatly improved in that it has greater vigor and quicker bleaching ability. The stalks are large, thick and fleshy, very brittle, crisp and of fine flavor. many growers who are having trouble with their yellow Celery should try this strain. Oz., \$2.00; 1/4 lb., \$7.00; 1 lb., \$25.00, postpaid.

All prices quoted herein are subject to available stocks on hand and subject to change without notice.



New Growers Green

# Michigan Golden Celery

MICHIGAN GOLDEN



YELLOWS-RESISTANT SELF-BLANCHING CELERY

An improved strain of the original Michigan Golden variety bred by plant pathologists of Michigan State College for resistance to Fusarium yellows and introduced by Grand Rapids Growers\* Inc.

GENUINE MICHIGAN GOLDEN SEED IS SOLD ONLY IN PACKETS BEARING THE SEAL OF MICHIGAN STATE COLLEGE

Michigan Golden is highly resistant to Fusarium yellows, also known as root rot, crown rot, stunt or sickness. It is not resistant to other celery diseases and seed treatment together with the use of protective dusts or sprays must be relied upon to control leaf blights.

In any inquiry concerning this seed inclose this label and address your commitment of the control leaf blights.

MICHIGAN STATE COLLEGE
DEPARTMENT OF BOTANY AND PLANT PATHOLOGY
EAST LANSING. MICHIGAN

No warrenty, expressed or implied, is given as to description, productiveness or purity of this seed and we can not be in any way responsible for the crop. If the purchaser does not accept these terms the seed should be returned immediately and money will be refunded.

Original Michigan State College seed is sold only in packets bearing this label and the seal of the College. No other seed is genuine. Beware of bulk seed of this variety.

## Cauliflower

CULTURAL DIRECTIONS. One ounce of seed will produce 4050 plants. Five ounces of seed to an acre. Directions about 4050 same as Cabbage, except planting in rows about 3 feet apart and 18 inches apart in the row. When plants begin to head, tie leaves up around the heads to protect from

Early Select Snowball 52 days. A very fine strain of this variety producing a magnificent head of snowy whiteness. Head is very compact, even and fine grained. The outer leaves are erect, tending to protect the young head from the hot sun. Selected for evenness in heading, enabling you to market the entire field in rapid succession. Oz., \$3.50; ¼ lb., \$11.50; 1 lb., \$40.00, postpaid.

★ Growers Special Improved 60 days. Medium sized heads, snowy white in color, evenly grained and compact. The very best variety of the Snowball type. Oz., \$4.00; ¼ lb., \$12.00; lb., \$45.00, postpaid.

Extra Early Dwarf Erfurt 57 days. An excellent sort, producing good sized creamy white heads. One of the best for general cultivation. Oz., \$3.50; ½ lb., \$11.50; l lb., \$40.00, postpaid.



Early Select Snowball

All prices quoted herein are subject to available stocks on hand and subject to change without notice.

Michigan State College Fusarium Yellows-Resistant Celery

Michigan Golden Celery was introduced by us in 1933 and its record since then has proven it to be the most resistant and the most productive yellow celery for growing on soils infested with the destructive root rot fungus. It is an especially valuable variety for midsummer and late crops that are subjected to the high soil temperatures of the summer months. Under those conditions Fusarium Yellows is most destructive in susceptible varieties of celery. Michigan Golden retains its high resistance under summer temperature conditions most favorable for root rot and will produce a crop when less resistant varieties are ruined.

Due to the nature of the Fusarium Yellows disease continuous breeding is required to maintain the high resistance of this variety. As a result of continuing reselection work, Michigan Golden is now greatly improved over the original introduction. Larger and more uniform stalks with a heavier base are characteristic of this new strain.

We strongly recommend Michigan Golden for planting in soils where Fusarium Yellows or root rot attacks other varieties of yellow celery. We especially recommend it for the summer and late crops. No one variety is adapted for use on all soils and for all climatic conditions, Michigan Golden is especially adapted for Michigan conditions but is widely and successfully grown in other sections of the country where root rot is also a destructive disease.

Michigan Golden was developed by plant pathologists of Michigan State College and the breeding work is continuing under their supervision. All genuine Michigan Golden seed is grown under their control, packeted at the college and sold only in the original sealed containers.

Prices:  $\frac{1}{2}$  oz., \$1.00; 1 oz., \$1.50; 2 ozs., \$3.00;  $\frac{1}{4}$  lb., \$5.00; 1 lb., \$20.00, postpaid.

One Dozen Stalks is an Armful of Michigan Golden



## Order early as available stocks are limited. The crop was very short this past season.

CULTURAL DIRECTIONS. Carrots require about the same simple care as beets; they have no serious insect enemies, and they are rarely attacked by disease. It is best to plant them in soil that is friable and richly fertilized. Plant the seed one-half inch deep in loose, well-prepared soil, making rows 16 to 24 inches apart. Cultivate as soon as the plants are well established and thin to 2 or 4 inches in the row, according to the size of the variety. Plantings may be made from early spring until mid-June. For winter storage the later date is advisable.

Supreme Half Long 75 days. A new home and market garden variety. Resembles a small refined Danvers with short tops. Roots 6 to 7 inches long, about two inches in diameter at shoulder, tapering to a half stump. Exterior smooth and of excellent color. Interior flesh tender, sweet and of fine flavor. Core small and the same dark red as the rest of the flesh. Has enough vigor and stamina to make it

easy to grow
\$3.50, postpaid.

77 days. An ideal new bunching Carrot for shippers and market gar-Streamliner 7d days. An ideal new bunching Carrot for shippers and market garStreamliner deners. Tops short, rather sparse, dark green and strong. Roots
long, slender, nearly cylindrical, 8-10 inches long, and they grow completely
underground. Oz., 30c; ¼ lb., \$1.00; 1 lb., \$3.50, postpaid.

Imperator with rounded shoulders and medium tapered roots. And the deep

Imperator with rounded shoulders and medium tapered roots. And the deep orange color of the exterior extends throughout the core and inside flesh, making it a Carrot of exceptionally fine flavor and quality. It has become a favorite, being used extensively for bunching. Oz., 30c; ⅓ lb., \$1.00; 1 lb., \$3.50, postpaid.

★ Nantes Coreless fine grained and of fine, mild, sweet flavor. The color is reddish orange and the skin is smooth. It is 6 inches long, cylindrical and very stump-rooted. Oz., 35c; ⅓ lb., \$1.05; 1 lb., \$3.75, postpaid.

★ Chantenay, Red-Cored well-known standard Chantenay, especially in color, texture and quality of flesh. Roots 5½ to 6 inches long, 2¾ inches thick at the shoulder; tapered stump root. Flesh and core reddish orange, fine grained and tender. A sweet. delicate flavor. A favorite with canners, market gardeners

shoulder; tapered stump root. Flesh and core reddish orange, nhe grained and tender. A sweet, delicate flavor. A favorite with canners, market gardeners and shippers. Oz., 30c; ¼ lb., \$1.00; 1 lb., \$3.50, postpaid.

Chantenay, Long Type 70 days. A strain of Chantenay bred especially for growing on soils where the moisture table is high.

Tops are shorter than the regular Chantenay. Roots definitely longer but fully charge at the process of the process as large; stump rooted at maturity. Texture and color equal to Red-Cored Chantenay. Suitable for bunching or bushel use. Oz., 30c; 1/4 lb., \$1.00; 1 lb., \$3.50, postpaid.

Chantenay

To days. A medium early, half-long variety for the early market.

Roots 5 or 6 inches long, smooth and tapering; orange-red in color.

Used largely for bunching. Oz., 30c; ½ lb., \$1.00; 1 lb., \$3.50, postpaid.

Touchon

Toucho



are subject to available stocks on hand and subject to change without notice.



Nantes Coreless Carrots

Danvers Half Long 75 days. The best main crop sort. Roots smooth and handsome. Very productive. Oz., 30c; ¼ lb., \$1.00; 1 lb., \$3.50, postpaid.

★ Morse's Bunching 77 days. Tops short; foliage rather coarsely cut and stems medium size and strong. Roots at maturity are 1½ to 1½ by 8 inches in size, almost cylindrical with rounded shoulders, and are well stumped. Oz., 35c; 1/4 lb., \$1.05; 1 lb., \$3.75, postpaid.

Long Orange 85 days. Good variety for deep sandy soil. Oz., 30c; 1/4 lb., \$1.00; 1 lb., \$3.50.

Scarlet Horn 60 days. A small, early, stump-rooted variety of good flavor and quite coreless. The roots will average about 3 inches long. Oz., 30c; 1/4 lb., \$1.00; 1 lb., \$3.50, postpaid.

Oxheart or Guerande 72 days. Very short, thick and stubby. Very desirable for heavy clay soil, as it is easily harvested. Oz., 30c; ¼ lb., \$1.00; 1 lb., \$3.50, postpaid.

White Belgian 95 days. Large, white stock carrot. Oz., 30c; ¼ lb., \$1.00; 1 lb., \$3.50, postpaid. Yellow Belgian 95 days. Grows one-third out of the ground. Very large, long yellow stock carrot. Oz., 30c; 1/4 lb., \$1.00; 1 lb., \$3.50, postpaid.

SPECIAL GROWERS RECOMMENDATIONS Our cultural directions are the special recommendation of our growers who through actual experience 'know what is necessary for the successful growing of a crop, and give it to you for your guidance.

# **Sweet Corn**

CULTURAL DIRECTIONS. One pint for 100 hills; about six quarts per acre. Early corn is planted in rows 2½ to 3 feet apart, and about 8 inches apart in the row, in May, and will be ready for the state of the state of planting. Later varieties should be planted from 10 ft May to the 15th of June. Plant in hills 3 to 4 feet apart. It will be ready for use in 11 is recommended for the control of the corn car worm to give four applications of dust or spray at five day intervals, beginning before the tassels show. If applied thoroughly to get the material into the growing whorl of the plant, it will control this pest. Twenty pounds of dust per acre is the proper rate.

per acre is the proper rate.

On all Sweet Corn, we reserve the right to limit quantities and would suggest in ordering that you specify your first, second and third choice of varieties.

Open - Pollinated

Golden Early Market 72 days. Earliest of the golden varieties and better than the golden Early Market Gill's Early Golden. Ears medium, 8- to 12-rowed of about the same size as Improved Bantam, with stalks 3½ feet tall, medium tender, sweet and of good flavor. A popular and prolific variety for home and market garden. Lb., 45c, postpaid. Not prepaid, 10 lbs., \$4.00; 25 lbs., \$9.50.

72 days. This corn is really a surprise. Matures in 72 days. It is a Early Surprise white-eared and white-cobbed corn of very good quality. Ears 7 to 7½ inches long, growing on stalk about 5 feet tall. Planted at the same time, it is a week to 10 days earlier than Early White Cory. If you want to have the first Sweet Corn on the market, be sure to plant Early Surprise. Lb., 45c, postpaid. Not prepaid,

10 lbs., \$4.00; 25 lbs., \$9.50.

★Golden "Sunshine" 74 days. A valuable new yellow variety for the market grower of the North Dakota Experiment Station, from a cross between the Golden Bantam of the North Dakota Experiment Station, from a cross between the Golden Bantam and Gill's Early Market, and combines the earliness and large size of ear of the Gill's Early Market with much of the high quality of the Golden Bantam. It is ready for market a week to 10 days earlier than Golden Bantam, and has a much larger ear, the cars averaging 8½ inches long, with 12 to 14 rows. Everyone who has tested this corn has much praise for its quality and extreme earliness. Especially valuable to the market grower. Lb., 45c, postpaid. Not prepaid, 10 lbs., \$4.00; 25 lbs., \$9.50.

\*\*Golden Bantam\*\*

79 days. Hardy, early maturing, very dwarf. Cob is small but fills low when ripe. No home gardens should be without this excellent corn. Lb., 45c, postpaid. Not prepaid, 10 lbs., \$4.00; 25 lbs., \$9.50.

Improved Golden Bantam 85 days. Superior to the original Golden Bantam in quality, and has a larger ear. It matures about the same time. Nearly all ears carry 12 rows of deep, rich, golden yellow kernels, set close upon the cob. It is a favorite with the market gardener. Lb., 45c, postpaid. Not prepaid, 10 lbs., \$4.00; 25 lbs., \$9.50.

Golden Evergreen 95 days. This new variety combines all the good qualities of Golden Bantam and Stowell's Evergreen. Has the bright golden color and tender kernels of Golden Bantam and the flavor and sweetness of Stowell's Evergreen, and the havor and sweetness of Stowers Evergreen. Ears much larger than Bantam; not quite as large as Evergreen, but much earlier. Stalks are full leaved and usually bear two well-developed ears. Lb. 45c, postpaid. Not prepaid, 10 lbs., \$4.00; 25 lbs., \$9.50.

Early Evergreen "90 days. Has all the merits of the white Corn. It is a splendid variety for the market gardener. Lb., 45c, postpaid. Not prepaid, 10 lbs., \$4.00; 25 lbs., \$9.50.

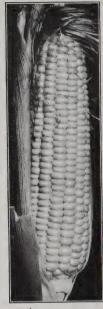
★Stowell's Evergreen 90 days. The most popular late Sweet Corn. More extensively planted than any other sort, being the general favorite with market gardeners. Ears are of good

cral tayorite with market gardeners. Ears are of good size, grain deep; tender and sugary. Lb., 45c, postpaid. Not prepaid, 10 lbs., \$4.00; 25 lbs., \$9.50.

Country Gentleman (days. An especially fine quality corn; without row formation. Lb., 45c, postpaid. Not prepaid, 10 lbs., \$4.00; 25 lbs., \$9.50.

Colden Country Gentleman 90 days. The result of crossing Country Gentleman and Golden Rantam is without a row formation.

man and Golden Bantam, is without a row formation and similar to Country Gentleman. Kernels deep and narrow. Lb., 45c, postpaid. Not prepaid, 10 4bs., \$4.00; 25 lbs., \$9.50.



\* Sunshine

Black Mexican 83 days. Reputed to be the sweetest and most delicious of all table Corn. Color is white when young, changing to bluish black in later stages. 1 lb., 45c, postpaid.

**Hybrids** 

A hybrid is the first generation of a cross between strains of different parentage and involving one or more inbred lines of corn or their combinations.

Marcross C6.13 67 days. This has proved a very good early market and home garden variety. Stalks are short but sturdy, highly resistant to Stewart's disease. Ears long, plump, abruptly tapered at the tips, 10- to 14-rowed with light creamyellow, medium broad kernels of good quality. Lb., 70c, postpaid. Not prepaid, 10 lbs., 86.00.

Golden Cross Bantam 85 days. Developed by Glenn M. Smith and introduced jointly by the U.S. Department of Agriculture and Purdue University Agricultural Experiment Station. Excellent for market gardens and well adapted for canners' use. Highly resistant to Stewart's disease and very prolific. Stalks sturdy, with exceptionally broad, dark green leaves. Ears 10- to 14-rowed, slightly lighter yellow than Golden Bantam. Kernels medium in width and depth. Lb., 70c, postpaid. Not prepaid, 10 lbs., \$6.00.

loana Hybrid (All-America Selection.) 87 days. A loana Hybrid (All-America Selection.) 87 days. A midseason yellow hybrid, highly resistant to both drought and wilt. Plants tall and sturdy with broad, numerous leaves. Ears 7½ to 8 inches long, 12 to 14 rows, cylindrical, well filled with medium narrow light yellow kernels. An attractive and productive variety for either gardener or canner. Lb., 70c, postpaid. Not prepaid, 10 lbs., \$6.00.

#### POP ( ORN

Australian Hulless Dwarf growing; heavy yielder of attractive ears; peculiar form, being nearly as thick as long. Color pearly white. Entirely hulless, making it the tenderest of any Pop Corn when popped. 1 lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75.

South American Yellow 110 days. Sunburst. Better adapted for Michigan climate. It matures about 2 weeks earlier than the true type South American yellow. Amber color, large size when popped, having a butter-colored tint. 1 lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75.

## **Table and Pickling Cucumbers**

CULTURAL DIRECTIONS. One ounce of seed to 50 hills; 2 pounds per acre. Cucumbers should not be planted until the ground is warm, about June 1st. For pickles, they may be planted as late as July 1st. They require a warm, rich, sandy soil. Plant in hills about 4 feet apart and about 8 seeds to the hill. When all danger from insects is past, thin to 3 or 4 of the stronger plants.

soil. Plant in finis about 4 feet apart and about 5 seeds to the finit. When all danger from insects is past, thin to 3 or 4 of the strongest plants. Cucumber Beetle—No. 10 Pyrocide Dust is the control measure to keep your Cucumbers clean. Apply promptly and grow your Cucumbers without any trouble. Circular free on request.

Grand Rapids Forcing (New Improved Strain.) 65 days. This seed was grown for us this past season under our ber that is truly worthy of the name "Grand Rapids Forcing." It is of the white spine type with blunt ends,

ber that is truly worthy of the name "Grand Rapids Forcing." It is of the white spine type with blunt ends, averaging 2½ to 3 inches in diameter and 10 to 12 inches long. An ideal forcing strain that will meet the demand of the greenhouse trade. 1 oz., \$1.25; ½ lb., \$3.50; 1 lb., \$12.00, postpaid.

★Improved "A & C" of this popular variety which was produced by us from seed secured from the originator, and on which we have made special selections in an endeavor to improve this splendid strain still further. The vigorous growing, disease resistant vines produce an abundance of uniform, exceedingly dark green cucumbers, averaging 10 inches long. The fruits are of uniform diameter from stem to blossom end, are rather slim, averaging 1½ to 1½ inches in diameter, without any bulge in the center, and with practically no taper at the ends. This is one of the best bred and most popular strains of cucumbers in existence. Oz., 30c; ¼ 1b., 95c; 1 lb., \$3.00, postpaid.

Chicago Pickling, or Westerfield's 58 days. Early, heavy yielder. A very prolific variety combining all the qualities desired by those who raise cucumbers. Fruits are of uniform size and good color. Used almost exclusively by all large pickling houses. Ready for market in 58 days. Oz., 20c; ½ lb., 60c; 1 lb., \$2.00, postpaid.

Improved Long Green 68 days. A standard sort. 12 to 14 inches long, slender, more or less warted,

sort. 12 to 14 inches long, slender, more or less warted, tapering towards the stem end, color dark green, flesh white and firm. Oz., 25c; ¼ lb., 75c; lb., \$2.50, postpaid.

Early Fortune
58 days. One of the most productive sorts now grown. Fruit symmetrical, green in color, which does not fade. Flesh very brittle and crisp, with small seed cavity. Oz., 25c; 1/4 lb., 75c; 1 lb., \$2.50, postpaid.

White Spine (Improved.) 58 days. A very fine, early metrical, thick and nearly square ended, vigorous and productive. Oz., 25c; 1/4 lb., 75c; 1 lb., \$2.50, postpaid.

Black Diamond 52 days. It is one of the earliest and market use. The length has been increased to nine inches and the extremely dark green color is retained well into the mature stage. It has rounded ends with a slight taper at the stem end. Highly productive. Oz., 15c; 1/9 lb, 45c; 1/1b, \$1.50, postpaid.

seed which ginatin an rither oduce feed, but the pullar Grand Rapids Forcing Grand Rapids Forcing Grand Rapids Forcing

Longfellow Cucumber

qually desirable for greenhouse forcing or outdoor culture. An ideal type for the private garden or as a straight pack variety for shipment to market. 12 to 14 inches long by 2½ inches in diameter. Fairly early, a good healthy grower, very productive. Oz., 30c; ½ lb., 95c; 1 lb., \$3.00, postpaid.

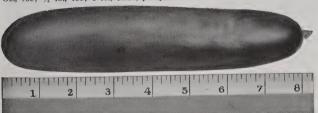
Davis' Perfect 58 days. One of the products of our the White Spine variety with a long English forcing cucumber. The Davis' Perfect is one of the most prolific sorts. The fruit is long, slim, and holds color till nearly ripe. Oz., 25c; 1/4 lb., 75c; 1 lb., \$2.50, postpaid.

#### Kale or Borecole

CULTURAL DIRECTIONS.
One ounce to 150 feet of drill.
Sow from August 15th to October in rows 18 inches apart,
and they will yield greens during fall and winter. They are
improved by freezing.

Note.—Kale as a general rule was a crop failure this past season, therefore we cannot offer the regular Tall and Dwarf curled varieties we have always listed.

SIBERIAN. 65 days. A vigorous growing variety of low spreading habit. Large, coarse, grayish green leaves which are slightly curled at the edges. Extremely hardy. Extensively grown for greens. Oz., 30c; ½ lb., 95c; 1 lb., \$3.00, postpaid.



Straight-8 62 days. This outstanding variety produces symmetrical cylindrical fruits about 8 inches in length and about 1½ inches in length and about 1½ inches in for use are deep green and free from objectionable striping or tipping. This is an ideal shipping variety, also equally desirable for the home and market gardener. Very short supply. Oz., 30c; ½ lb., 95c; 1 lb., 83.00, postpaid.

## **Eggplant**

CULTURAL DIRECTIONS. One ounce to 1000 plants. Seed germinates very slowly and requires warm ground. Start in hotbeds in March, transplant about June 1st, in rows about three feet apart and two feet apart in the row. Eggplant requires a rich soil, free from disease and rotation of crops is recommended.

Black Beauty 80 days. Early and productive. Fruit large and of a rich glossy black color. Oz., 75c; 1/4 lb., \$2.25; 1 lb., \$7.00, postpaid.

New York Purple 80 days. A favorite market variety. Fruits large, spreading and spineless, producing 4 to 6 large, oval fruits of dark purple color. Oz., 75c; ½ 1b., \$2.25; 1 bb., \$7.00, postpaid.

#### Endive

CULTURAL DIRECTIONS. One ounce to 150 feet of drill. Sow in rows about 15 inches apart and thin to one foot apart in the row. Sow seed for fall crop in June or July. When nearly full grown, tie outer leaves together bringing them up over the head for blanching. A well balanced fertilizer is recommended.

Long Green Curled 95 days. The most hardy and vigorous sort, white. After blanching, the leaves make a delicious and appetizing salad. Oz., 20c; ½ lb., 60c; 1 lb., \$2.00, postpaid.

Moss Curled 95 days. Grows more compact than the green curled and the medium green leaves are finer cut, blanches creamy white. Oz., 20c; ½ lb., 60c; 1 lb., \$2.00, postpaid.

Broad-Leaved Batavian (Escarolle). 90 days. One of the best varieties for salads; leaves of upright growth, broad, more or less twisted and waved, bright deep green, with a nearly white midrib. Inner leaves form a fair head which blanches a creamy white. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.



Black Beauty Eggplant

## **Cress or Pepper Grass**

CULTURAL DIRECTIONS. Sow early in the spring in rich, well prepared soil, in rows about fifteen inches apart. Thin to four inches apart in the row. Extra Curled (Pepper Grass). A small, curled plant having a fine pungent flavor and used as a salad. Should be sown thickly and frequently, covering very lightly as it soon runs to seed. May be cut several times. Not available.

#### Collards

75 days. Plant 2 to 3 ft. high, form-True Georgia ing a cluster of tender, undulated leaves at the top of its rather long stem; used as greens. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.



#### Kohl-rabi Turnip-Rooted Cabbage

CULTURAL DIRECTIONS. One ounce to 200 feet of drill. Seed should be sown in light, rich soil, very early in the spring for early crop, in rows eighteen inches apart and thin to six inches apart in the row. Plantings should be made the latter part of July for fall use. Should be used when young and tender.

Early White Vienna 60 days. Very early, small tops, can be planted close together; best for forcing, or field culture. Oz., 80c; 1/4 lb., \$2.50; 1 lb., \$8.00, postpaid.

## Leek

American Flag 150 days. Stem about 10 inches long by 2 inches thick. A strong, vigorous plant with mild flavor. One of the best sorts for the market garden. Oz., 90c; 1/4 lb., \$2.75; 1 lb., \$9.00, postpaid. Elephant (Monstrous Carentan). 150 days. Large stems 6 to 8 inches long, 2 to 3 inches thick. Leaves very dark green, hardy, prolific, for fall and early winter use. Oz., 90c; ½ lb., \$2.75; 1 lb., \$9.00, postpaid.



White Vienna Kohl-rabi

## **Leaf Lettuce**

CULTURAL DIRECTIONS. One ounce to 150 feet of drill. Lettuce requires rich soil to grow best quality. Mix pulverized hen manure well with the soil and sow seed very early in the spring. For Leaf Lettuce, sow in rows twelve inches apart and do not thin until plants are big enough to use. Head Lettuce should be sown in rows twelve inches apart and thinned to eight inches apart in the row.

A fertilizer high in nitrogen and phosphate is recommended, especially for sandy soils.

During warm weather, germination may be greatly aided in firming the seed bed, and sowing the seed shallow. Keep the soil moist until germination is completed.

#### \* Grand Rapids Forcing, Washington Strain

45 days. This splendid strain is one of the favorite strains, being used by all of the large greenhouse growers, who recommend it as a superior lettuce. It was first produced by plant selection by the honored W. W. Tracy of the Agricultural Department at Washington. Mr. Yonker procured some from Eugene Davis, sent him by Mr. Tracy. Mr. Yonker, by careful plant selection, has kept it up to its original purity. It is absolutely true to type and is more like the original Grand Rapids Foreing as it came from the hands of Eugene Davis. Mr. Yonker is well qualified to continue the breeding of this variety and can be depended upon to keep it up to its present high standard. There are very few, if any, sports. Color a light green; heads very heavy; leaf crisp, tender and curly; quality of the best. We grow our stock seed in the greenhouse and send to one of the best lettuce seed growers on the Coast to grow the seed crop. Oz., 25c; ½ lb., 70c; 1 lb., \$2.25, postpaid.

Grand Rapids Tip-Burn Resistant 45 days. Color light like the Washington strain, being used for greenhouse growing where tip-burn is visible. Oz., 25c; 1/4 lb., 70c; 1 lb., \$2.25, postpaid.

Early Curled Simpson 40 days. An early loose leaf variety. One of the best sorts for the home garden. Oz., 25c; ½ lb., 75c; 1 lb., \$2.25, postbaid.

★Black-Seeded Simpson 40 days. One of the best loose leaf varieties for the home garden or for the market garden, for outdoor sowing. Can be grown all through the season. Very tender. Oz., 25c; ¼ lb., 70c; 1 lb., \$2.25, postpaid.

Prizehead 45 days. A crisp and tender loose-leaved, non-heading sort, color light brown on a medium green base, quality good. Oz., 25c; ¼ lb., 70c; 1 lb., \$2.25, postpaid.

#### **Head Lettuce**

Big Boston 76 days. Heads best in cool weather of recommend it for the hot summer months. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.

White Boston 76 days. Has a fine, large, solid head and light green outer leaves, but does not have the brown edges. A tightly folded heart that blanches to a bright, creamy yellow shade. It is sweet and crisp. Oz., 30c; ½ lb., \$1.00; 1 lb., \$3.50, postpaid.

Great Lakes squared and the Michigan State College. Leaves large and well folded; heavy ribs. Shows considerable resistance to tip-burn and ability to head under adverse conditions. Oz., 50c; ¼ lb., \$1.75; 1 lb., \$6.00, postpaid.

Imperial 847 Grisp heading plants of medium size. Leaves smooth, thick, medium light green. Heads round, well folded and firm. Oz., 30c; ½ lb., \$1.00; 1 lb., \$3.50, postpaid.



Grand Rapids Forcing, Washington Strain

★ Imperial No. 152 82 days. New heading variety that is outstanding over other varieties. Resistant to brown blight, and well adapted for early fall planting. The heads are medium sized, hard, and attractive. Oz., 30c; 1 lb., \$3.50, postpaid.

Imperial 44 [82 days. This is somewhat similar to popular variety. It has very long well-folded leaves and produces hard well-formed heads under ideal circumstances. Oz., 30c; ¼ lb., \$1.00; 1 lb., \$3.50, postpaid.

All Seasons 80 days. Heads very large, grayish green, beaves rather thick but blanch to a beautiful golden yellow. This variety wants hot weather to head well and is not satisfactory for early spring crop. Oz., 20c; ½ 10, 60c; 1 lb., \$2.00, postpaid.

Hanson 80 days. Forms large, flat head; outer leaves are bright green. inner leaves white, quality good. Oz., 25c; 1/4 lb., 85c; 1 lb., \$2.50, postpaid.

New York or Wonderful 175 days. A large, late globular heading variety, leaves broad, of thick texture, fairly blistered and crumpled, and the borders frilled; color dark green, quality good. Known in California and the West as "Los Angeles" and shipped to eastern markets under the misleading name of "Iceberg." For an all-season variety it stands unrivaled. Oz., 30c; 1/4 lb., \$1.00; 1 lb., \$3.50, postpaid.

Romaine or Early White Self-Folding Lettuce We consider this the very best strain of the Cos variety. Very uniform in type, and forms a compact, firm head. Color dark green outside and beautifully blanched inside. Very crisp; sweet. Oz., 25c; ½ lb., 85c; 1 lb., \$2.50, postpaid.

#### CANADIAN CUSTOMERS

We will accept your order only on remittance payable in United States funds or its equal. Notice announcement on page 3.

\* Recommended by Michigan State College

## Muskmelons

CULTURAL DIRECTIONS. One ounce will plant 50 hills, two pounds an acre. Melons do best in a rich, sandy soil. Hills should be from four to six feet apart. Plant ten to twelve seeds to the hill. Cover seeds with an inch of soil. When danger from frost and insects is past, thin to four good plants to the hill.

#### SPECIAL GROWERS RECOMMENDATIONS

Our cultural directions are the special recommendations of our growers who through actual experience know what is necessary for the successful growing of a crop and give it to you for your guidance.

★Hearts of Gold 88 days. A splendid small, round, with a tendency to heart shape, lightly ribbed and covered with a fine gray netting; flesh very thick, deep salmon color, and of high quality; a good shipping Melon. Oz., 25c; ¼ lb., 70c; 1 lb., \$2.25, postpaid.

★Honey Rock 80 days. One of the most proliround, slightly flattened at the ends, of medium size and distinctly netted. The flesh is soft pink with a greenish tint. The rind is hard and the flesh so firm that it is an excellent shipper. Oz., 25c; ¼ lb., 70c; 1 lb., \$2.25, postpaid.



Hearts of Gold

Pride of Wisconsin 85 days. Similar in size and shape to Honey Rock. Oval in shape with tough heavily netted rind. Flesh deep orange and very thick. Sweet and of excellent quality. Oz., 25c; ¼ lb., 70c; 1 lb., \$2.25, postpaid.

Hale's Best Muskmelon 82 days. Has become one of the most popular melons for the home and market garden trade. It is fairly early, a good shipper, oval in shape, averaging 5 inches in diameter and 7 to 9 inches long with heavy netting, and fairly prominent ribs. The flesh is a rich deep salmon color with a very fine flavor. Oz., 25c; ½ lb., 70c; 1 lb., \$2.25, postpaid.



Honey Rock Muskmelon

Extra Early Osage 87 days. A very fine Melon of the Osage type. Seed cavity very small. Flesh deep, rich yellow color, very sweet and delicious. At least one week earlier than Osage Melon, smaller, vine prolific. Oz., 25e; ½ lb., 70c; 1 lb., \$2.25, postpaid.

Osage 92 days. A rather large, oval Melon of very superior quality, fruit dark green, slightly ribbed and well covered with a shallow, gray netting; flesh rich orange-salmon, exceedingly thick, with a small seed cavity. Oz., 25c; ½ lb., 70c; 1 lb., \$2.25, postpaid.



Hale's Best

NO. 10 PYROCIDE DUST is the control measure against beetles and other insects. Apply promptly and grow your melons without any trouble. Circular free on request.

## **Selected Varieties of Watermelon**

CULTURAL DIRECTIONS. One ounce to 30 hills, about four pounds per acre. Watermelons want rich, sandy soil. Cultural directions the same as for Muskmelons, except the hills should be eight feet apart.

Cole's Early 75 days. One of the earliest than 12 inches long. Flesh red and sweet; rind thin and brittle. Not a good shipper, but good for home garden and early market. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

Tom Watson to 24 inches long by 10 to 12 inches in diameter. Flesh deep red and very crisp; melting and of exquisite flavor. Good shipper. Oz., 20c; ½ lb., 50c; 1 lb., \$1.50, postpaid.

#### \* Kleckley's Sweet or Monte Cristo

85 days. One of the sweetest melons on the market; medium early, long, averaging 18 to 20 inches, slightly tapering to the stem end. Rind very dark green, flesh very bright red and ripens nearly to the rind. Too tender for a shipping melon, but excellent for market and home garden. Oz., 20c; ½ lb., 50c; 1 lb., \$1.50, postpaid.

Peerless or Ice Cream \$5 days. An old standby. Medium early; fruit oblong, large size; rind light green, mottled and veined; flesh scarlet, solid to center, sweet, melting and delicious. Not a good shipper. Oz., 20c; ½ lb., 50c; 1 lb. \$1.50, postpaid.

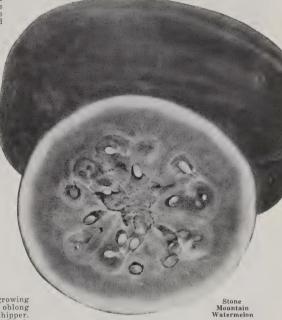
Sweetheart 85 days. A medium early variety growing to a large size; a heavy, round to oblong form with rather thick, tough rind and a good shipper. Color very light green, flesh bright red, with black seeds. Oz., 20c; ½ lb., 50c; 1 lb., \$1.50, postpaid.

Citron, Red Seeded 90 days. The old well known redseeded preserving Melon. Oz., 20c; ¼ 1b., 50c; 1 lb., \$1.50, postpaid.

Stone Mountain

90 days. This variety combines extra large size with earliness. It is nearly round in shape, pleasingly green in color and unexcelled for sweetness and juiciness. Fruits weigh from 60 to 80 pounds in the South, and the 95 days required for maturity make it easily possible to grow correspondingly large fruits in the North. Oz., 20c; ½ lb., 50c; 1 lb., \$1.50, postpaid.

Irish Grey 95 days. Especially valuable for distant light grayish green, rind extremely hard and rough; flesh bright red, of good quality. Oz., 20c; ½ lb., 50c; 1 lb., \$1.50, postpaid.



Dixie Queen and the home garden. Excellent quality, fruit nearly round, with light and dark green stripes, growing to a good size. Rind thin, but tough—flesh bright scarlet, solid, of fine texture. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

## Mustard

Southern Giant Curled 30 days. Plant vigorous and hardy, upright spreading growth, leaves large, green tinged yellow, much crumpled and frilled at the edges. Oz., 20c; 1/4 lb. 50c; 1 lb., \$1.50, postpaid.

Kleckley's Sweet or Monte Cristo

## Okra or Gumbo

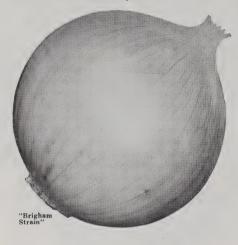
White Velvet 30 days. Plants 3½ feet high, pods white, long, smooth and tender; early and productive. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

#### Perkins Mammoth Long Pod

56 days. For home and market garden. Plants 4 to 5 feet tall, pods dark green, fleshy, tender, becoming 7 to 8 inches long. Distinctly ribbed and tapered. Oz., 10c; ½ lb., 30c; 1 lb., \$1.00, postpaid.

## **Choice Onion Seed**

CULTURAL DIRECTIONS. One ounce to 100 feet of drill; about four pounds to the acre. Onions for the market are generally grown on muck land in Michigan, but may be grown for home use on any rich, loamy soil. They appreciate plenty of fertilizer on muck; the market growers apply heavily about a 2-8-16 fertilizer. Drill in rows about a foot apart.



#### \* "BRIGHAM STRAIN" The Long Keeping Onion

109 days. The seed stock for this fine strain of Onion seed is grown under our own supervision. The bulbs used are very carefully selected to insure our users that this variety is pure. Bulbs are selected for type and quality, and produce larger Onions with a vigorous growth. Onions grown from our seed stock are very good keepers, globe shaped with a rich golden color. Oz., 50c; ½ lb., \$1.60; 1 lb., \$5.50, postpaid.

★ Southport Yellow Globe 110 days. This Onion is our yellow market variety. It is very uniform as to size. A good yielder, and recommended for its keeping qualities in storage. A handsome yellow globe variety. Oz., 50c; ¼ lb., \$1.60; 1 lb., \$5.50, postpaid.



★Extra Early Yellow Globe 98 days. Excellent semigood yielder. It ripens well, and under normal conditions the bulbs are ready for market 10 days ahead of the Southport Yellow Globe. The color is a rich deep yellow and it can be kept in storage for a limited time. Oz., 50c; ⅓ lb., \$1.75; 1 lb., \$6.00, postpaid.



#### **Sweet Spanish**

The supply this year is limited and we would suggest that our customers place their orders as soon as possible subject to our confirmation and prior sale.

Utah Sweet Spanish (110 days). Desirable becolor, excellent keeping qualities, thicker skin and uniformity in size. Bulbs are globe in shape at about 2½ to 3 inches, when larger they assume a slightly flattened globe shape. Flesh white and of mild pleasing flavor. Oz., 90c; ½ lb., \$3.00; 1 lb., \$9.50, postpaid.

Sweet Spanish, Grower's Strain 110 days. The the yellow onions, averaging 3 to 4 inches in diameter. The best and not susceptible to the attack of thrip. Good keeper and shipper. Oz., 90c; ¼ lb., \$3.00; 1 lb., \$9.50, postpaid.

This variety recommended by the Michigan State College.

#### ONION SEEDS—Continued

Prizetaker or Mammoth Yellow Spanish 105 days. Very nearly round, light straw color, very mild and sweet. Late. Oz., 90c; ¼ lb., \$3.00; 1 lb., \$10.00, postpaid.

Yellow Globe Danvers 105 days. A very popular detional keeper. Oz., 50c; 3/4 lb., \$1.75; 1 lb., \$6.00, postpaid.

★Southport White Globe 120 days. Same type as Souththin delicate skin of pure paper whiteness, but two weeks earlier and exceedingly mild. It usually commands the highest price on the market. Oz., 90c; ¼ lb., \$3.00; 1 lb., \$10.00, postpaid.

White Portugal or Silverskin

100 days. An early flat white Onion of mild flavor. Used mostly to grow sets. Oz., 90c; 1/4 lb., \$3.00; 1 lb., \$10.00, postpaid.

Long Bunching (Heshiko) (American Grown). A new perennial bunching onion that does not form a bulb. Oz., 90c; ½ lb., \$3.00; 1 lb.,



Southport White Globe

#### Chives

A hardy perennial of the onion type. Listed under "Herbs" on page 30. Pkt., 10c; oz., 90c; ¼ lb., \$3.00; 1 lb., \$10.00, postpaid.



#### **Onion Sets**

We can supply the Silverskin sets, Ebenezer or Japanese sets as well as Egyptian or Perennial Top Sets. Write for prices.



Champion Moss Curled Parsley



Hollow Crown Parsnip

## **Parsley**

CULTURAL DIRECTIONS. One ounce to 150 feet of drill. Seed germinates very slowly. Sow thickly in rows about 15 inches apart, and thin to four or five inches apart in the row. Parsley requires a rich soil.

Triple Curled or Moss Curled 85 days. (Paral mount.) Plant handsome, beautifully curled and rapid grower. Will produce a large crop. Oz., 15c; ½ lb., 45c; 1 lb., \$1.25, postpaid.

Hamburg Rooted 90 days. Grown for the root which resembles a parsnip in shape and color. Foliage very much like plain parsley. Oz., 15c; 1/4 lb., 45c; 1 lb., \$1.25, postpaid.

**Parsnips** 

CULTURAL DIRECTIONS. One ounce will sow 100 feet of drill; three to four pounds per acre. Sow in April or May. Parsnips require a long season to mature. Sow thickly, thin as for Carrots. Seed does not germinate well unless conditions are just right.

Hollow Crown variety is more generally grown than any other sort; roots smooth, tender and sugary. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, post-

Long Smooth Dutch or Sugar very long, slim, much sweeter than the Hollow Crown. Oz., 20c;

much sweeter than the Hollow Crown. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

Short Thick 100 days. A fine bunch vegetable, tops one-half size of Hollow Crown. Short, thick roots, free from strings, flavor much more delicate than other varieties of Parsnips. Fully a month earlier than Hollow Crown and reaches maturity in 100 days. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

All prices quoted herein are subject to available stocks on hand and subject to change without notice.

## Garden Peas

CULTURAL DIRECTIONS. One quart will plant 100 feet of drill; about 56 pounds per acre. Peas do best on rich, sandy loam that has been well manured the previous season. Plant smooth, early sorts as soon as the ground can be worked in the spring. The wrinkled varieties are liable to rot if the soil is cold and wet, and should be planted later.

Little Marvel or Dark Podded Sutton's Excelsior 60 days. One of the most pro-Pods long, 3 to 4 inches, well filled with deliciously sweet peas. Vines about 15 inches in height. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75; 14 lbs. (1 pk.), \$4.50; 56 lbs. (1 bu.), \$16.75.

Little Gem 58 days. A second early, hardy variety. Prolific, bearing pods on both sides of the stalk, beginning near the ground. Pods medium length, round, and well filled to the end. Height of vine about 15 inches. Seed green, wrinkled. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75; 14 lbs. (1 pk.), \$4.50; 56 lbs. (1 bu.), \$16.75.

Alaska 57 days. A small, smooth blue Pea, and one of the earliest. Grown largely by canners and market gardeners for early crop. Vines about two feet in height, pods small, but well filled. Can nearly all be harvested at one picking. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75; 15 lbs. (1 pk.), \$4.50; 60 lbs. (1 bu.), \$16.75.

American Wonder 60 days. One of the earliest and sweetest wrinkled Peas. Vines wery dwarf and productive. Pods small, but well filled. The most delicious Pea for the home garden. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75; 14 lbs. (1 pk.), \$4.50; 56 lbs. (1 bu.), \$16.75.

\*Improved Laxionian

62 days. The best of the Laxtonian type. Second early, A little earlier than the Gradus. Vine 16 inches high, sturdy, dark green and productive; pods dark green, four inches, broad, containing eight large peas of excellent quality. The best second early, big-podded sort. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75; 14 lbs. (1 pk.), \$4.50; 56 lbs. (1 bu.)

Champion of England 80 days. Vines 4 to 5 feet in height, productive. Pods 2 to 3 inches long, broad and well filled. Peas medium size, of unsurpassed sweetness. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75; 14 lbs. (1 pk.), \$4.50; 56 lbs. (1 bu.),

\$16.75.

★World's Record 58 days. A new variety on the order of Gradus, being slightly earlier, more productive and true to a fixed type. Grows about more productive and true to a fixed type, Grows about 2 feet in height, with large, dark green pods nearly 4 inches in length, broad, pointed and always well filled with large, sweet peas of splendid quality. An excellent, profitable sort for home or market garden. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75; 14 lbs. (1 pk.), \$4.50; 56 lbs. (1 bu.), \$16.75.

★ Thomas Laxton 62 days. One of the best second early sorts for the market gardeners. Vines of same height as the Gradus, but a little earlier, more hardy and productive. Pods long, bluntended and well filled with large peas. Peas wrinkled. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75.

14 lbs. (1 pk.), \$4.50;
15 lbs. (1 bu.), \$16.75.



Little Marvel Peas

#### ★ Dwarf Telephone

A splendid main crop Pea, coming between the Telephone and Stratagem. Of the Stratagem type, but a heavier yielder. Height 21/2 feet. Foliage very heavy, sturdy and dark green. Pods 41/4 inches long, dark green, broad, straight and pointed, containing nine large, medium nine large, medium dark green peas of the best quality. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75; 14 lbs. (1 pk.), \$4.50; 56 lbs. (1 bu.), \$16.75.



★ Alderman 72 days. A little later than the Telephone. Vines about four feet in height; very heavy foliage. One of the most productive sorts. Pods long, dark green, well filled; seed wrinkled. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75; 14 lbs. (1 pk.), \$4.50; 56 lbs. (1 bu.), \$16.75.

Telephone 72 days. A standard high quality, large-podded Pea, for main crop; productive; height 4½ feet. Vine and foliage strong and heavy, medium green. Pods 4½ inches long, medium green, straight, broad and pointed, well filled. Lb., 40c, post-paid. Not prepaid, 5 lbs., \$1.75; 14 lbs. (1 pk.), \$4.50; 56 lbs. (1 bu.), \$16.75.

## **Edible Pod Sugar Peas**

The pods of the two varieties listed below are cooked with the peas. They have a high sugar content and make a delicious dish, and once tried, they will be regularly grown.

Dwarf Gray Sugar 62 days. A dwarf, edible pod variety. Vines about two feet high. Cook pods like string beans. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75; 14 lbs. (1 pk.), \$4.50; 56 lbs. (1 bu.), \$16.75.

Melting Sugar, or Edible Pod 70 days. A tall variety, bearing large, flat, brittle pods. These are sweet and are cut or broken and cooked like string beans. It is a delicious vegetable and should be better known and more generally used. Lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75; 14 lbs. (1 pk.), \$4.50; 56 lbs. (1 bu.), \$16.75.

BE SURE TO INCLUDE POSTAGE ON ALL QUANTITIES MARKED "NOT PREPAID." SEE RATES ON PAGE 3.



Bull Nose or Large Bell 55 days. Large, bell-shaped, Mango pickles. Oz., 60c; 1/4 lb., \$2.00; 1 lb., \$7.00,

World Beater 70 days. The most prolific large Pepper. Flesh thick, mild and sweet. Pepper tapering and of a bright ruby color when ripe and very attractive. Oz., 60c; ¼ lb., \$2.00; 1 lb., \$7.00, postpaid.

Ruby King 65 days. One of the most profitable and satisfactory varieties for the home or market garden; plants are early, productive and of dwarf compact, upright growth; fruits pendent. often 4 to 6 inches long by 3 to 4 inches thick, tapering and of a bright ruby-red color; flesh is thick, mild and sweet. Oz., 60c; ½ lb., \$2.00; 1 lb., \$7.00, postpaid.

Red Chili 85 days. Small, red, cone-shaped. Very hot and prolific. Used for seasoning. Oz., 60c; ¼ lb., \$2.00; 1 lb., \$7.00, postpaid.

Sweet Yellow The largest yellow Pepper. Skin golden yellow, flesh thick, very mild and sweet. Of about the same shape as the Bull Nose. Oz., 60c; 1/4 lb., \$2.00; 1 lb., \$7.00, postpaid.

CULTURAL DIRECTIONS. One ounce will produce about 2000 plants; about 7000 plants for an acre. Sow seed in hotbeds from February to April; transplant to open ground when all danger from frost is past, in rows about three feet apart and eighteen inches apart in the row. Seed can be sown in the open ground late in May, and thinned as above. Cover seed about half an inch.

Neapolitan 60 days. A very early, medium large, prolific variety. Fruits upright in growth, three-lobed, yellowish green, becoming bright red, flesh extremely mild and sweet. Oz., 50c; ¼ lb., \$1.75; 1 lb., \$6.00, postpaid.

California Wonder
72 days. Thickness of flesh alone, which is often % of an inch, places this sweet pepper above all others. Vigorous growing plants, blocky fruit 5 inches long and 4 inches wide. When fully matured, it has a waxed appearance. Oz., 60c; ¼ lb., \$2.00; 1 lb., \$7.00, postpaid.

Oakview Wonder 63 days. An earlier and more pro-Fruits blocky, smooth, with thick, mild, sweet flesh. Plants blocky, smooth, with thick, mild, sweet nesh. Plants shorter and stockier but fruits are set earlier and more abundantly. An outstanding strain unsurpassed for shipping and for the home and market garden. Oz., 80c; ½ lb., \$2.50; 1 lb., \$8.00, postpaid.

Chinese Giant 80 days. Mammoth fruits 12 to 15 inches mild and sweet. Oz., 50c; ¼ lb., \$1.75; 1 lb., \$6.00, postpaid.

Harris' Early Giant of dwarf, compact prolific of all large Peppers. Is growth, bearing as many as 12 pendent fruits on a single plant. Fruit scarlet, measuring 5 inches long by 3½ inches in diameter; three-lobed, mild and sweet. A profitable Pepper for the market. Oz., 60c; ½ lb., \$2.00; 1 lb., \$7.00, postpaid.

★ King of the North 64 days. A late introduction and a winner, similar in type to Ruby King, but decidedly earlier. The plant is of medium size and prolific. The fruit is long, moderately slender, tapering to three or four points. Oz., 60c; ¼ lb., \$2.00; 1 lb., \$7.00, postpaid.

Pimento 73 days. A rather late, very thick-fleshed, heart-shaped, smooth, mild, crimson variety; much used for salads. Oz., 35c; ½ lb., \$1.25; 1 lb., \$4.00, postpaid.

Long Red Cayenne 70 days. Pendent fruits about 5 inches long and 3 inch in diameter at the base, often curved and twisted; bright red, hot and pungent. Oz., 60c; 1/4 lb., \$2.00; 1 lb., \$7.00.

Hungarian Yellow Wax (Hot.) 60 days. Very early. Desirable for home, market garden and canning. Plants small, heavily productive. Fruits 6 to 7 inches long, 2 inches thick, tapered, smooth, waxy light yellow becoming bright red. Flesh thick, pungent. Oz., 40c; ¼ lb., \$1.50; 1 lb., \$5.00, postpaid.

Pumpkins

Cultitural Directions. One ownee of seed for 20 hills. About 3 pounds per acre.

Usually grown in cornfields, but can be grown as a separate crop. Seed should be planted in hills 8 to 10 feet apart each way, kins after leaves die, leaving three to four inches of stem attached to fruit. Store in a dry place, and do not bruise.

Sugar or Pie Pumpkin CULTURAL DIRECTIONS. One ounce of seed for 20 hills. About 3 pounds per acre

Connecticut Field 70 days. Generally used for planting in corn for stock feeding; also makes good pies. Oz., 1b., 50c; 1 lb., \$1.50, postpaid.

King of the Mammoths Often grows two feet or more in diameter. Oz., 25c; 14 lb., 75c; 1 lb., \$2.50, postpaid.

★ Sugar Pie 108 days. Fruit small, round, flattened at the ends, and slightly ribbed. Skin and flesh deep orange yellow. Flesh very thick and of high quality. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

Winter Luxury 100 days. Round, medium in size, with a golden yellow skin closely netted like a netted musk-melon; sweet and finely flavored and an exceptionally good keeper. Oz., 20c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.

Victory Pie 115 days. A large crook-necked sort. Skin green, striped yellow. Flesh yellow and of fine quality. Oz., 20c; 14 lb., 50c; 1 lb., \$1.50, postpaid.





Grand Rapids Forcing Radish

#### CANADIAN CUSTOMERS

We will accept your order only on remittance payable in United States funds or its equal. Notice announcement on page 3.

★ Early Scarlet Globe 20 days. We have an exceptionally fine stock of this grand variety, which has been tested by having crops grown both in greenhouses and outdoors. Our new stock will not be sold until it is tested. It is one of

> radishes, tender, color





The Grand Rapids Forcing Varieties are nationally known. Turn to the others: Lettuce is described on page 15; Tomato on page 26; and Cucumber on page 13; also the inside back cover.

Radishes prefer a deep, rich, sandy soil and an application of a well balanced fertilizer.



Early Scarlet Globe

bright scarlet. Oz., 10c;  $\frac{1}{4}$  lb., 30c; 1 lb., \$1.00, postpaid. Not prepaid, 10 lbs. at 85c per lb. If larger quantities are wanted, write for prices.

Cavalier

25 days. A highly colored and attractive variety for all purposes and especially for shipping. Tops small, roots oblong-globe, very firm and of bright red color. Especially adapted for growing on muck soils. Oz., 10c; ½ lb., 30c; 1 lb., \$1.00, postpaid. Not prepaid, 10 lbs., 85c per lb. If larger quantities are wanted, write for prices.

★ lcicle 25 days. One of the earliest long varieties, white throughout. Very crisp and tender. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

French Breakfast 20 days. Of oblong shape, small, quick growing, color rose-scarlet, with small white tip. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

Cooper's Sparkler 20 days. White tip, quite similar to Scarlet Turnip Sparkler is more round or ball-shaped, and the white extends farther up the radish, making a more attractive bulb. Oz., 10c; ½ lb., 30c; 1 lb., 85c, postpaid.

Scarlet Turnip White Tipped 25 days. Round, deep scarlet, shading to a white tip at the bottom. Very early. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

Crimson Giant 28 days. Larger than any other extra early variety but does not become pithy. Crimson-carmine, turnip-shaped, flesh firm, crisp and tender. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.



White Icicle

## The Best Winter Radishes

White Winter (Celestial.) 60 days. Roots six to eight inches long, thick, cylindrical and smooth, with a beautiful white skin and flesh, the whitest and least pungent of the winter radishes. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

Chimese Rose Winter 52 days. Roots four or five inches long, blunt at both ends, about two inches thick. Skin smooth and bright, deep rose color. Flesh white and crisp. One of the best winter sorts. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

Long Black Spanish 56 days. One of the latest and hardiest varieties for winter use; in color. Oz., 10c; 14 lb., 30c; 1 lb., \$1.00, postpaid.



American Purple Top Rutabaga

Round Black Spanish 56 days. Round, 3 to 4 inches in diameter. Skin almost black; flesh white, crisp and pungent. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

# Rutabagas Mature in 100 days.

American Purple Top A hardy, American rurple 10p tive variety with small neck; roots large, globe-shaped, with small tap roots, bright yellow in color with

small tap roots, bright yellow in color with purple top, solid, tender and sweet. Our strain is the best available. Oz., 20c; ½ lb., 60c; 1 lb., \$1.80, postpaid.

Long Island, Improved Grows large, top-flesh yellow. Used for stock feeding or table use where a large Rutabaga is wanted. Oz., 20c; ½ lb., 60c; 1 lb., \$1.80, postpaid.

Canadian Gem Golden yellow variety, globular shaped with small tap root. A very solid variety, tender and sweet. Oz., 20c; ½ lb., 60c; 1 lb., \$1.80, postpaid.



#### Rhubarb

Victoria One of the best market sorts; stalks a beautiful red. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

SOYBEANS

(6-5 bu. cans)

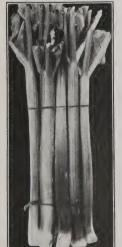
Salsify or Vegetable Oyster

CULTURAL DIRECTIONS. One ounce to 75 feet of drill; 5 or 6 pounds to the acre. Sow the seed early in the spring in drills twentve inches apart and one inch deep. Thin to four or five inches apart. Like parsnips, they may be left in the ground all winter and dug as soon as the ground is thawed. Salsify prefers a deep, rich sandy soil.

Mammoth Sandwich Island

150 days. A splendid variety producing large, thick, tapering white roots. very uniform, mild and delicious in flavor. A popular sort with the market gardeners. Oz., 80c; ½ lb., \$2.50; 1 lb., \$8.00 postavid

\$8.00, postpaid.



Rhuharl

# INOCULATE ALL LEGUME SEEDS WITH

1898-FORTY-SIX YEARS OF SERVICE-1944 When ordering. Always state name of seed.

ALFALFA Swt., Bur, Hubam Clovers Size Retail 1 bu. each...\$.50 2½ bu. each... 1.00

CLOVERS Medium & Mammoth Red, Alsike, Crimson & White Clovers

1 bu. each...\$ .50 2½ bu. each... 1.00 LESPEDEZA 100 lb. size (Inoculates up to 100 lbs.) ..\$ .50

PEAS (All Varieties) **VETCHES**(AllVarieties) 100 lb. size (Inoculates up to 100 lbs.) ea.\$ .50 1200 lb. size ea. 5.70 (12-100 lb. cans)

LUPINES (All Varieties)

100 lb. size (Inoculates up to 100 lbs. seed) ea. \$ .50 GARDEN SIZE—Peas, Beans, Sweet Peas, Lupines
Enough for 8 lbs. seed — Retail Price 10c each



Salsify

All prices quoted herein are subject to available stocks on hand and subject to change without notice

# Spinach Improved Varieties

CULTURAL DIRECTIONS. One ounce to 100 feet of drill; eight to ten pounds per acre. Sow early for spring crop; in August for fall use; and if sown from the middle to last of September, and protected during the winter with a light covering of straw, it will be ready for use very early in the spring.

A fertilitzer high in nitrogen and phosphate is recommended, especially for sandy soils.

During warm weather, germaitton may be greatly aided by firming the seed bed, and sowing the seed shallow. Keep the soil moist until germination is completed.

★ Long Standing Bloomsdale 42 days. It is early and hardy and a decided improvement on the old strain. Will stand ten to fourteen days before bolting to seed; has a heavier leaf texture, more crumpled or savoyed, and will also resist the heat much better. Oz., 10c; ¼ lb., 25c; 1 lb., 75c, postpaid. Not prepaid, 10 lbs., \$7.00; 25 lbs. or more, 60c per lb.

Round Summer Thick Leaved dard. Grand Rapids growers use this variety very largely for main crop for spring, summer and fall. Oz., 10c; ¼ lb., 25c; 1 lb., 75c, postpaid. Not prepaid, 10 lbs., \$7.00; 25 lbs. or more, 60c per lb.



New Savoy Dark Green

Giant Nobel 45 days. Similar to Thick Leaf. An erect, vigorous growing, long standing Spinach, slow to run to seed. Leaves large, unusually broad, firm and thick, with a rounded top. Smooth, medium green in color and the largest of any Spinach. Oz., 10c; ½ 1b., 25c; 1 lb., 75c, postpaid. Not prepaid, 10 lbs., \$7.00; 25 lbs. or more, 60c per lb.

Viking 45 days. This new variety may well be described as a dark green Nobel. Excellent for market gardens and canning. Plant large, spreading, vigorous, large, thick and dark green. Oz., 10c; ½ lb., 25c; 1 lb., 85c, postpaid. Not prepaid, 10 lbs., \$7.50; 25 lbs. or more, 70c per lb.

Heavy Pack 48 days. This is a good strain of Viking. Plants are strong and vigorous with large medium green, slightly crumpled thick leaves on short stalks. Color is intermediate between Nobel and King of Denmark. Oz., 10c; ¼ 1b., 25c; 1 bs., 85c, postpaid. Not prepaid, 10 lbs., \$7.50; 25 lbs. or more, 70c per lb.



Giant Nobel Spinach

★ King of Denmark 48 days. A standard variety for market gardeners, for spring plantmarket gardeners, for spring planting. It will stand longer than any other variety before going to seed. Leaves large, rounded, and somewhat blistered. Color very deep green. Heavy yielder and excellent quality. Oz., 10c; ½ 1b, 25c; 1 lb, 75c, postpaid. Not prepaid, 10 lbs., \$7.00; 25 lbs. or more, 60c per lb.

New Savoy Dark Green 42 days. A very dark green extra curled Savoy type, of compact habit. It is more long standing than Bloomsdale Long Standing, of a superior color and in our opinion, the best type of Savoy Spinach existent. Given special mention in "All-America Selection." Oz., 10c; ½ lb., 25c; l lb., 75c, postpaid. Not prepaid, 10 lbs., \$7.00; 25 lbs. or more, 60c per lb.

Virginia Savoy Blight-Resistant Spinach ginia Savoy is characterized by the large leaves and general Flanders type of growth. The low-growing, wide-spreading habit type of growth. The low-growing, wide-spreading nabit makes it most desirable for winter Spinach. Plants of this type attain a very large size in late fall and carry well into early spring. A single plant often weighs more than a pound. Oz., 10c; ½ lb., 25c; 1 lb., 75c, postpaid. Not prepaid, 10 lbs., \$7.00; 25 lbs. or more, 60c per lb.



SPECIAL GROWERS RECOMMENDATIONS Our cultural directions are the special recommendation of our growers who through actual experience know what is necessary for the successful growing of a crop and give it to you for your guidance.

# Squash

CULTURAL DIRECTIONS. For Summer Squash, one ounce to 25 hills; two to three pounds per acre. For Winter Squash, one ounce to ten hills; about three pounds per acre. After danger of frost is past, plant eight to ten seeds to the hill for Summer sorts, about four feet apart, the last of May; and Winter varieties in hills about eight feet apart, from the middle of June to July first. Do not bruise or break the stems of Winter Squash when gathering. Store in a cool, dry place.

Early Prolific Straightneck 50 days. A high yielding squash. Fruits straight, smooth, and of delicate creamy color. Will grow 12 to 14 inches long but can be eaten when small-Quality unsurpassed. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

Giant Summer Crookneck 55 days. The largest and one of the earliest summer varieties; fruits often 2 to 2½ feet long; very warty and deep orange in color. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

Golden Summer Crookneck 55 days. A standard early and productive summer squash; fruits about a foot long, moderately warted and of a bright yellow color. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

Banana 105 days. A prolific, oblong variety 2½ feet banana in length by 6 inches in diameter, having a gray-green shell. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.



60 days. Very Early White Bush Scallop of days. Very early summer squash. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

Early Yellow Bush Scallop 54 days. A true bush the above. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.

Turban (Novelty Winter Squash.) 100 days. Fruits 9 to 10 lbs., of distinctive shape; cylindrical, flattened with a prominence set in a depression at the blossom end, "a squash within a squash." Skin or-ange-red, somewhat rough, flesh orange and of good flavor. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

Mammoth Table Queen 60 days. Similar to the regular Table Queen squash, but larger in size. The quality is unsurpassed and it is a wonderful addition. Much in demand by both home and market gardeners. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.



Table Queen Squash

Table Queen 58 days. A squash fit for a queen. Cut it is delicious. Wonderful producer. Fruits are from 6 to 8 inches long and 4 to 6 inches in diameter. Shell

6 to 8 inches long and 4 to 6 inches in diameter. Shell hard and smooth, dark green with sometimes a blotch of red at pointed end. Will keep as long as the Hubbard. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.

Zucchini Fruits very nearly cylindrical, straight. Color medium green, mottled with cream-gray and lighter green lace pattern and stripes, flesh very firm and of delicate flavor. Oz., 20c; ¼ lb., 80c; 1 lb., \$2.50, postpaid. postpaid.

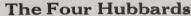
Delicious 103 days. The standard of excellence in win-Delicious ter squashes. Fruits broad top-shaped, com-monly 7 to 8 inches long; skin very dark green, fairly smooth rind, thin but hard; flesh extremely thick, bright yellow, fine grained and dry, without fibre and of highest quality. Oz., 20c; ½ lb., 80c; 1 lb., \$2.50, postpaid.

Golden Delicious 103 days. Valuable for canners because of the high starch content of its flesh and the bright red-orange color of the exterior. In shape and season it is practically the same as the original Delicious. Oz., 20c; 1/4 lb., 80c; 1 lb., \$2.50, postpaid.

100 days. Similar in shape to the Turban. Buttercup Rind thin and tough, dark green with narrow gray stripes and slight mottling. Orange flesh cooks sweet and dry. A small, thick-fleshed squash of good storage and eating qualities. Oz., 20c; 1/4 lb., 80c; 1 lb., \$2.50, postpaid.

Cocozella di Napoli (Italian Vegetable Marrow.) 60 days. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

No. 10 PYROCIDE DUST is the control measure against beetles and other insects. Apply promptly and grow your squash without any trouble. Circular free on request.



Golden Hubbard 100 days. Similar to the old Hubbard in form and habit, though smaller and decidedly earlier; shell moderately warted, rich orangered; flesh deep orange, fine quality; good keeper. Oz., 20c; 1/4 lb., 80c; 1 lb., \$2.50, postpaid.

★Improved Hubbard 105 days. The standard winter squash. Shell modwinter squash. Shell moderately warted; deep dark bronze-green; flesh bright yellow, fine grained, thick and dry. Oz., 20c; ¼ lb., 80c; 1 lb., \$2.50, postpaid.

★ Chicago Warted Hubbard 105 days. Similar quality and form to the Hubbard, but fruit larger and a little later. Oz., 20c; ¼ lb., 80c; 1 lb., \$2.50, postpaid.

Blue Hubbard 105 days. A new type of Hubbard squash and said to excel all in the superior quality of its flesh. Similar to the original Hubbard but having a hard blue-gray shell. Oz., 20c; ¼ lb., 80c; 1 lb., \$2.50, postpaid.



All prices quoted herein are subject to available stocks on hand and subject to change without notice.



## **Ideal Forcing Tomatoes**

A new variety originated by Mr. John Nellis of Grand Rapids, Mich. Mr. Eugene Davis and Prof. Waide, now of Ohio, selected the original parent plant of the Ideal Tomato. It is the result of crossing the Bonny Best with the Comet and has the heavy yielding quality and the tough skin of the Comet and the high color of the Bonny Best. Mr. Nellis has selected and reselected the plants until they have arrived at a high state of purity; and breed absolutely true to type. The plant does not grow as tall as the Grand Rapids Forcing but will yield as many pounds per plant. It has no green, unripe core, is dark red in color, not an acid fruit but of excellent quality, and is a larger Tomato and a splendid shipper. Oz., 75c; ¼ lb., \$4.50, postpaid.

#### CANADIAN CUSTOMERS

We will accept your order only on remittance payable in United States funds or its equal. Notice announcement on page 3.

# Grand Rapids Forcing TOMATOES

Grown in Greenhouses Everywhere

#### Improved Growers Strain

It's improved and is one of the best foreing Tomatoes on the market today. It is a larger size, averaging about three or four o a pound and eliminating the green core. he yield is very heavy as the intense sexal vigor of the plant causes a great prouction of pollen and this is probably the nly Tomato that is self-fertilizing or pollenizing, which insures a heavy setting of fruit.

This Tomato is red in color, of good size, firm and meaty. The skin is tough and it is a wonderful shipper and keeper.

The plant is a vigorous, robust grower and should be trimmed to about 6 feet in height. Price: Oz., 50c; ½ lb., \$2.00; ½ lb., \$3.50, postpaid.



Ideal Forcing Tomatoes





Stokesdale 70 days. A second-early scarlet fruited variety maturing about a week earlier than Marglobe. Plant rather open in habit with medium heavy foliage. Fruits large, globe or sub-globe, smooth and well colored. Oz., 80c; ½ lb., \$2.40; 1 lb., \$8.00, postpaid.

Bonny Best 73 days. Unexcelled as a general purpose tomato; particularly valuable for forcing under glass and as a canning variety in northern sections. Fruits evenly colored bright deep scarlet-red;

medium large; flattened globe-shaped; smooth and firm. Oz., 80c; ¼ lb., \$2.40; 1 lb., \$8.00, postpaid.

70 days. Selection of Marglobe, disease resistant, adapted to all soils. Fruit somewhat smaller, bright red color, and very prolific. Oz., 80c; ½ lb., \$2.40; 1 lb., \$8.00, postpaid.

Greater Baltimore crop variety. Deep scarlet-red in color, vigorous and very productive. Preferred by color, vigorous and very productive. Preferred by canners on account of its heavy yield. Oz., 80c; ¼ lb., \$2.40; 1 lb., \$8.00, postpaid,

★John Baer 73 days. An early, productive, red to-mato, on the order of the Chalk's Jewel. Splendid producer. Oz., 80c; ¼ lb., \$2.40; 1 lb., \$8.00, postpaid.

New Stone its with truckers and canners, always dependable, very vigorous and productive, fruits round, large, solid, smooth, and deep red in color. Oz., 80c; 1/4 lb., \$2.40; 1 lb., \$8.00. postpaid.



Dwarf Stone 81 days. The best of the dwarf tomators. Fruits large, smooth, very solid, of a deep scarlet color. Oz., 80c; 1/4 lb., \$2.40; 1 lb., \$8.00, postpaid.

Victor "All-America Selections". 65 days. Awarded Bronze Medal. This Tomato is a dwarf selftopping variety. It can be planted close, 5 feet by 3 feet. It sets fruit when other varieties fail. Is extra early, even ripening, with small vines. Color is uniform, scarlet and has a very noted smoothness of skin. A very solid Tomato that does not crack and is a good shipper. Oz., 80c; ¼ lb., \$2.40; 1 lb., \$8.00, postpaid.

90 days. An attractive pink-skinned variety. Oxheart 190 days. An attractive pink-skinned variety. It is exceedingly smooth and tender and almost seedless. It has that delicious mild flavor. Rich soil adds greatly to its productiveness. A late variety. Oz., 80c; 1/4 lb., \$2.40; I lb., \$8.00, postpaid.

Break o' Day 70 days. The earliest disease-resistant, troduced, 10 to 12 days earlier than Marglobe and very productive. Fruits are of the Marglobe type, deep globe-shaped, solid, meaty, with few seeds and a beautiful scarlet color. Excellent for home gardens, truck farmers or canners. Oz., 80c; ½ 1b. \$2.40; 1 lb., \$8.00, postpaid.

Scarlet Dawn 70 days. A leading early variety for medium growth, fairly open, very prolific. Fruits medium large with thick wall structure, globular, medium large with their wan structure, growth as smooth, free from flat sides, bright scarlet, ripening well to the stem, exceptionally attractive. Adapted to both field and greenhouse production. Oz., 80c; 1/4 lb., \$2.40; 1 lb., \$8.00, postpaid.

83 days. The best large yellow tomato. Golden Queen Fruits are large, deep but flattened, bright golden yellow, firm, smooth, and attractive. Oz., 50c; ¼ lb., \$1.50, postpaid.



Very produc-75 days. Pritchard or Scarlet Topper tive early sort. The splendid, globe-shaped, smooth fruits grow to a attain an attractive bright red color. Flesh firm, mild flavored, free from acidity, with no core and small seed cavity. Plants grow compact and robust and produce a heavy crop when planted in good rich soil. Oz., 80c; 1/4 lb., \$2.40; 1 lb., \$8.00, postpaid.

Ponderosa 85 days. A very large, purple-fruited to-acid. Fine for slicing. Oz., 80c; ¼ lb., \$2.40; 1 lb., \$8.00, postpaid.

Beefsteak (Red Ponderosa). 90 days. A wilt-resistant large variety for home and market garden use. Plant is open in habit of growth, heavy. The fruit is large, flat, scarlet, rather smooth. Oz., 80c; ¼ lb., \$2.40; 1 lb., \$8.00, postpaid.



Marglobe Tomato

Marglobe The Wilt and Nailhead Rust-Resistant Sort. 75 days. Was produced by crossing Livingston's Globe with one or more other varieties. It is a vigorous grower whether in greenhouse or field. A bright red in color, of large size, almost round, and very productive. It is very promising. Oz., 80c; ¼ lb., \$2.40; 1 lb., \$8.00, postpaid.

Earliana 64 days. The most productive, first early red Tomato and a profitable sort for the market gardener. Vines are small but vigorous, fruits medium to large in size, exceptionally smooth and solid; color bright deep scarlet. Oz., 80c; ½ lb., \$2.40; 1 lb., \$8.00, postpaid.

Chalk's Early Jewel 75 days. An exceptionally fine early variety. About ten days later than the Earliana. Fruit round, smooth and solid. Color crimson. Extremely productive. Oz., 80c; 14, 1b., 82.40; 1 lb., 88.00, postpaid.



Yellow Pear Tomato

Small Fruited Tomatoes Used for pickles, preserves, canning, etc. Easily grown and yield well. Yellow Plum, Red Pear, Yellow Pear and Red Peach. Price of any of the four varieties: ¼ oz., 15c; oz., 50c, postpaid. Special: One packet of each of these four varieties for 35c, postpaid.

## **Certified Tomato Seed**

Grown in Michigan and certified by the Michigan Department of Agriculture.

CULTURAL DIRECTIONS. One ounce will produce about 3000 plants; about 5000 plants to the acre.

Certified Early Baltimore Oz., 80c; 1/4 lb., \$2.40; 1 lb., \$8.00, postpaid.

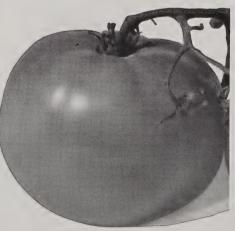
Certified Bonny Best Oz., 80c; 1/4 lb., \$2.40; 1 lb., \$8.00, postpaid.

Certified New Stone Oz., 80c; 1/4 lb., \$2.40; 1 lb., \$8.00, postpaid.

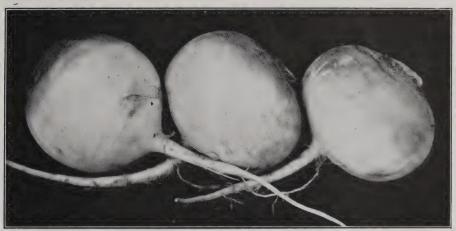
Certified Marglobe Oz., 80c; 1/4 lb., \$2.40; 1 lb., \$8.00, postpaid.

Certified Rutgers 114 days. It has a thick outer and inner wall of solid meat. Globe shaped, scarlet-red in color, resembling Marglobe. The Rutgers is in great demand for all purposes. Oz., 80c; 14 lb., \$2.40; 1 lb., \$8.00, postpaid.

Certified Greater Baltimore Oz., 80c; 1/4 lb., \$2.40; lb., \$8.00, postpaid.



Greater Baltimore Tomato



Purple Top White Globe Turnip

## **Turnips**

CULTURAL DIRECTIONS. One ounce to 150 feet of drill; one pound per acre. For main crop, sow in July or August. Sow either broadcast or in drills.

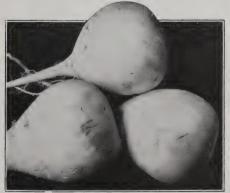
★ Purple Top White Globe 55 days. Not so early as in shape. Flesh and skin white, colored purple or red above ground. Very fine grained and sweet. The most attractive turnip and best seller. Oz., 20c; 1/4 lb., 50c; 1 lb., \$1.65, postpaid.

Extra Early White Milan 40 days. The earliest bulbs, small, clear white, and flat. One of the best for early bunching. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.65, postpaid.

Purple Top Strap Leaved 45 days. A very early, flat ple or red above ground and white below. Oz., 20c; ½ lb., 50c; 1 lb., \$1.65, postpaid.

Golden Ball 65 days. Tops small, roots medium size, round, smooth and deep yellow. Fine grained, flesh firm, crisp and sweet. Oz., 20c; 1/4 lb., 50c; 1 lb., \$1.65, postpaid.

★ Recommended by Michigan State College



White Egg Turnip

White Egg 55 days. An early egg-shaped variety. Roots smooth, clear white. One of the best for market. Oz., 20c; 1/4 lb., 50c; 1 lb., \$1.65, postpaid.



Yellow Globe Turnip

Yellow Globe Turnip

Yellow Globe variety of medium size and good quality. Oz., 20c; ½ lb., 50c; 1 lb., \$1.65, postpaid.

Cow Horn 65 days. Roots long, slightly crooked; clear white. Often sown to plow under for fertilizer. Oz., 20c; ½ lb., 50c; 1 lb., \$1.65, postpaid.

Yellow Aberdeen 75 days. A late, medium sized, long keeping variety, roots round, yellow with a purple top, flesh tender. Oz., 20c; ½ lb., 50c; 1 lb., \$1.65, postpaid.

Seven Top 45 days. For turnip greens. Extremely hardy foliage turnip for table or forage use. Root is woody and indelible; crown sends up numerous shoots which are excellent for greens. Oz., 15c; ½ lb., 45c; 1 lb., \$1.25, postpaid.

15c; 1/4 lb., 45c; 1 lb., \$1.25, postpaid.

#### SEED TREATMENT PAYS

Treat your seeds with Semesan disinfectants and assure yourself of a good crop. Seed treatment pays no matter what kind of seed is treated. We handle a complete line.

All prices quoted herein are subject to available stocks on hand and subject to change without notice.

## Aromatic, Medicinal and Pot Herbs

For early use, sow seed in hotbed or in open ground in May, in rows one foot apart. Cover very lightly and thin to six inches apart in the row. They should be cut on a dry day, just before they come into full blossom. Tie in bunches and keep where they will dry quickly.

ANISE. Used for garnishing, seasoning and for cordials. Pkt., 10c, post-paid.

BASIL, SWEET. Annual. About 12 inches tall. Entire plant has fragrant, somewhat spicy aroma; used for seasoning. Pkt., 10c.

CARAWAY. Seeds are used for flavoring breads, pastry, meats, etc. Pkt., 10c, postpaid.

CELERIAC or TURNIP-ROOTED CEL-ERY, Giant Prague. Pkt., 10c, postpaid.

tensively for salads. The new leaf growth forms a compact blanched head with broad, crisp leaves, having a pleasantly sharp flavor. Pkt., 10c, postpaid.

CHIVES. Hardy perennial plants of the onion type. Easily grown from seeds. The small leaves are used for seasoning. Pkt., 10c; oz., 90c; 1/4 lb., \$3.00; lb., \$10.00, postpaid.

CORIANDER. The seeds are used for flavoring. Pkt., 10c, postpaid.

DANDELION. Improved thick leaf.
Very superior strain, Makes vigorous, very compact growth. Leaves 18 to 24 inches across, thick in texture and blanch readily. Pkt., 10c, postpaid.

DILL. Leaves are used in pickles and for flavoring soups and sauces. Oz., 20c; ½ lb., 60c; 1 lb., \$2.00, postpaid. LAVENDER. True. Perennial. Flowers

LAVENDER. True. Perennial, Flowers are dried and placed in the linen closet to impart their perfume to the linens. Also used as a repellent to moths. Pkt., 10c, postpaid.

FLORENCE FENNEL. Grown in home and market garden. Plant 2 to 3 feet tall. Chiefly grown for the bulb-like structure formed by the enveloping thickened bases of the stalks of the lower leaves. This is aromatic and of a delicate sweet flavor. Pkt., 10c, postpaid.

SAGE. The most extensively used of any herb. An indispensable perennial. Very aromatic. Oz., \$1.50; pkt., 25c, postpaid. Very scarce.

SAFFRON. Used for coloring certain dishes, also flavoring. Pkt., 10c, postpaid.

SUMMER SAVORY. The leaves and young shoots are used for flavoring. Pkt., 10c, postpaid.

THYME. Hardy perennial, 8 to 10 inches tall, of strong, agreeable, aromatic odor and flavor; used in medicine and for seasoning culinary preparations, Pkt., 10c; 1 oz., \$2.00, postpaid.



All prices quoted herein are subject to available stocks on hand, and subject to change without notice.





• There can be no reserve of fresh green vegetables ex-

cept in gardens.
 The interruption of the rapid transport of these foods to market next summer, may cause widespread shortage

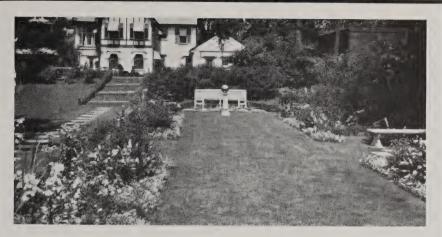
overnight.
 The vital importance of these protective, vitamin-rich foods in the diet, especially of children, is well established.

 You can protect your family and contribute to national preparedness by growing a large part of the vegetables you need in your own back yard.

# Be Ready!

Plan and Plant Early For Whatever May Come!





# ... for Grass, Flowers and Vegetables YOU WILL BE PROUD OF

IGORO

• Vigoro is America's largest selling plant food. Vigoro grows fine lawns, fragrant, colorful flowers and delicious vegetables because it supplies, in scientifically balanced proportions, all 11 food elements plants need from the soil.

Safe, sanitary, odorless, and easy to apply. And Vigoro is economical. A single 100-lb. bag will feed 2500 square feet of lawn and flowers! FEED EVERYTHING YOU

GROW THIS YEAR ... ENJOY THE MAGICAL RESULTS OF VIGORO . . . the complete plant food.

VIGORO PRICES																							
1	lb																	,					\$0.10
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## VIGORO Supplies All Plants 11 Vital Elements



## Making a Lawn and Its Care

#### **Preparing the Soil**

The most desirable soils for the lawn are the loams. If the soil available for the building of the lawn is a tight clay or a sandy soil, it should be made as nearly like a loam as possible.

Even such simple tasks as spading are important and should be done with care. The depth of the surface soil largely determines the depth to which one should spade. If the top soil is six inches or less in thickness, work it to the depth of the surface soil. Do not turn up the subsoil.

To get the best results from spading, each shovelful of soil is turned over and placed upon the edge of the hole away from the spader. It is then pulverized with a tap of the spade. This not only breaks up the mass but carries the granulated soil back into the hole from which it was originally taken.

After the spaded soil has been well pulverized, grade the soil to slope gently from the house. The grading will prevent water from standing around the foundation of the house. Next, level and roll until the seed bed is firm.

#### **Applying Plant Food**

When the seed bed is completed, plant food should be applied. The lawn is never so effectively fed as just before the grass seed is sown. The plant food should be spread evenly over the surface of the soil at the rate of four pounds per hundred square feet, and worked into the top few inches.

#### **Sowing Seed**

After the plant food has been worked into the soil, the seed should be spread uniformly over the surface at the rate of four to five pounds per one thousand square feet of soil.

A cover of clean straw or coarse cheesecloth on the steep slopes will help to prevent washing which may occur before the grass becomes established.

(Continued on the following page)

#### Maintaining the New Lawn

Regardless of how carefully the new lawn has been started it must be painstakingly cared for during the first summer, if it is to develop into a lawn with a uniform, thick turf.

The new lawn should be watered often enough to keep the soil moist. Frequent and light waterings are best until after the grass becomes established. When there is no longer danger of washing the young plants from their anchorage, the soil should be thoroughly soaked to a good depth at each watering. The water should always be applied in the form of a fine spray.

Careful clipping of the grass is necessary to maintain a tidy Careful cipping of the grass is necessary to maintain a tidy appearance of the lawn and to prevent annual weeds from going to seed. Frequent clippings, which do not allow the grass to become more than three inches high, are desirable. Never cut the grass shorter than one and one-half inches. The clippings should always be removed from the lawn; otherwise there is danger of their matting and injuring the grass. Lawn clippings make excellent raw materials for the compost pile.

Feeding

About eight or ten weeks after the lawn is seeded, the young grass should again be fed plant food. The application is made at the rate of two pounds per one hundred square feet of lawn.

Plant food should be applied when the grass is dry and then brushed from the grass with a broom or the back of a rake. The lawn should immediately be given a thorough soaking to wash the plant food from the grass and carry it into the soil.

#### Care of the Established Lawn

If the lawn was properly built and has received careful attention during the first year of its growth, its future care should be easy. The program for the established lawn includes feeding, watering, clipping, and similar operations which are necessary in maintaining a good lawn. A lawn which is properly cared for improves each year as the grass becomes more dense and more uniform.

#### Spring Care of Lawn

As soon as favorable weather comes in the spring,

As soon as lavorable wearner comes in the spring, the lawn should be rolled.

Any thin or bare spots should be reseeded. These may at times appear in any lawn and should be taken care of at the time they occur. Loosen the surface of the soil in such areas and reseed.

#### Importance of Feeding

Well-fed grass withstands the inroads of weeds and also resists injury from the attacks of certain diseases

Regular feeding will reduce the amount of re-seed-Regular reduling will reduce the amount of re-seeding necessary. The greater development of the root system and the ability to store up reserves of food material, make well-fed grass plants able to withstand the extremes of either winter or summer weather and to maintain a dense turf year after year.

Proper feeding results in an improvement in the

Proper feeding results in an improvement in the condition of the lawn soil. As new roots are sent out by vigorous grass plants, the old ones die off and are responsible for adding large amounts of organic mater to the soil. This is the only way that the organic content of the soil of the established lawn can be increased. creased. The activity and decay of the roots also keeps the soil in good physical condition. Manure or similar materials applied on the lawn never penetrate deeply enough to add any appreciable amount of organic matter to the soil.

#### Summer Care of the Lawn

Special care must be given the lawn throughout the hot months of summer. If excellent growth and vigor have been maintained during the spring, the lawn can be kept in a green, vigorous condition during the summer by careful watering, feeding and clipping. Whenever applying water to the established lawn, be liberal with the amount used. Light sprinklings which wet only the upper surface of the soil are very often more detrimental than kenesical.

often more detrimental than beneficial.

Smaller amounts of plant food should be applied during the summer months than in the spring. Two pounds per hundred square feet is sufficient to keep the plants in vigorous growth, if made at intervals

of six to eight weeks.

The lawn should be thoroughly soaked following the application of plant food. Apply sufficient water to soak the soil surface to a depth of several inches.



SPECIAL. Width 36 inches. Capacity 100 lbs. \$25.00 Price .....

\$16.90

Do a better job of applying Vigoro, lawn seed, etc. Saves time, money and labor.

## Grade "A" Sunny Lawn Mixture

This is our own mixture, containing Kentucky Blue Grass, Fancy Red Top, Perennial Rye Grass, and 10% pure White Clover. Wonderful results are and have been obtained with this mixture. We use only the very best of seeds obtainable, of lasting value and hardiness, giving you a beautiful and permanent lawn that will last for years.

## Grade "A" Shady Lawn Mixture

Contains Kentucky Blue Grass, Red Top, and New Zealand Chewings Fescue. This mixture is also our own, being mixed by ourselves especially for the shady spots. We use only the very best of seeds obtainable and as more care and attention is required we have used the hardier grasses, that will make a dense, thick growth in light soils and a very satisfactory lawn in shady places or where sun is available only a part of the time.

Inasmuch as we mix our own grass mixtures we have the individual grasses for those who want straight grasses in one spot or another.

Kentucky Blue Grass, June Grass One of the best for permanency. For lawns or pasture, it has no superior. Does well in any soil and stands the summer heat remarkably well. As it takes some time to become established, it is usually sown in mixtures.

Red Top A very hardy perennial grass, succeeding best on moist land. Valuable for lawn or pasture, and will produce large crops of good hay.

Domestic Rye An annual grass, coarser than blue grass, being used extensively on banks and terraces.

White Clover (Dutch). A small, low growing variety. It is largely used in lawns and pastures. It makes a small, close, compact growth covering the ground like a carpet. Its blossoms are round, white and sweet scented, with numerous leaves of bright green color.

Creeping or Red Fescue Resists extreme drought, on inferior soil, gravelly banks and exposed hills.

Bent Grass One of the most valuable lawn grasses. Exceptionally good for golf courses, greens, etc., because of its short growth and deep green, fine-leaved foliage. Requires very rich soil and plenty of moisture.

Prices will be Quoted on Request.

### FLOWER SEED DEPARTMENT

We are convinced that many of the failures with flower seeds are due to lack of proper conditions, and while it would be impossible in the space at our disposal in this catalog to give explicit directions for each and every variety which we offer, we feel sure that if the general directions given below are followed, success will be the rule.

All of our flower seeds are listed by their common name in strict alphabetical order, together with the botanical name for your guidance.

#### Success With Flower Seeds

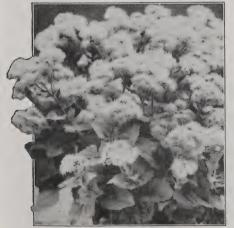
For all flower seeds which should be started indoors, the For all flower seeds which should be started indoors, the best plan is to sow in carthenware seed pans or boxes (about 2 inches deep) which should be filled to the deept of an inch with any rough material that will furnish perfect drainage. The upper inch should be nicely sitted soil, composed, if possible, of about one-third each of sand, leaf mould and light garden loam. Press firmly and evenly and water thoroughly the day before sowing. Sow the seeds thinly over the surface, cover about one-eighth of an inch and press firmly. When the seedlings are large enough to handle, they should be transplanted into similarly prepared boxes an inch apart each way, or put into small pots and kept in same until time to plant out in the open ground. At all times they should have an abundance of air, otherwise the young seedlings are liable to "damp off."

wise the young seedings are liable to "damp off."
For most of the ordinary annual flowers, the simplest method is to sow directly out-of-doors when danger of frost is past in the space where they are intended to flower. The ground should be dug and raked fine on the surface, sowing the seeds evenly and thinly, covering not over four times their size, and firming the soil over them. Should they come up too thickly, as most of them are likely to do, thin out so that the plants will stand from 4 to 12 inches apart, according to the variety.

#### How to Sow Flower Seeds

It will prove quite an advantage to mix all small seeds with sand or dry soil and scatter broadcast. This separates the seeds and is quite an advantage in thinning out or transplanting the young plants as those that remain are undisturbed. A common mistake in sowing flower seeds is covering too deeply. The exception to this is the Sweet Pea, which is seldom planted deep enough. As a general rule, cover small seeds only to the depth of the thickness of the seeds; always press the earth after sowing all flower seeds, else there is danger of their drying up before the roots can get firm hold of the soil. Seed of the hardier annuals may be sown where they are to grow; but as a rule, it is preferable to transplant, as the plants are generally stronger and stand the drought better. During very dry weather, and when the seedlings are first set out, they should be watered freequently. watered freequently.

The weeds should be kept down and the ground loosened often, so that the plants will receive the full benefit of the rains and dews, which they will not if the ground is allowed to become hard and baked.



Ageratum

Annuals are those flowers which bloom and die the same year; grown from seed exclusively.

Biennials bloom and die the second year from the seed-

Perennials grow the plant the first year but do not flower until the second year and then bloom every year.

#### SPECIAL NOTICE!

Where many of the flower seeds and herbs are an imported item, it is extremely difficult to say whether or not there will be any available for planting this year; however, we would appreciate your inquiry and will quote prices on request, if available later in the season.



Sweet Alyssum

ABRONIA (Sand Verbena). Pkt., 10c.

#### Alyssum (A)

(SWEET ALYSSUM) Very popular border flower. Dwarf habit, blooming until killed by frost. Fine for beds, borders and vases. Little Gem. Erect; white. 1/4 oz., 30c; pkt., 10c. Violet Queen. Pkt., 10c. Violet Queen. Pkt., 10c. Carpet of Snow. Pkt., 10c.

#### Alyssum (P)

Saxatile compactum (Basket of Gold). 9 inches high. Blooms in May and June, producing masses of golden flowers very early. 1/4 oz., 25c; pkt., 10c.

#### Ageratum (A)

(FLOSSFLOWER) One of the best summer blooming plants. They are rapid

One of the best summer blooming plants. They are rapid growers; early and constant bloomers.

Mexicanum Tall. 18 inches. Beautiful, soft lavender-blue, of free branching habit. ½ oz., 40c; pkt., 10c.

Blue Cap. Selected. 6 inches. Definitely more dwarf, more compact in habit with small leaves. Bright, deep, rich lavender-blue. ½ oz., \$1.50; pkt., 10c.

Blue Perfection. Pkt., 10c.

ARCTOTIS, Grandis. Pkt., 10c. ANCHUSA ITALICA, Dropmore. Pkt., 10c. ARABIS, Alpina. Pkt., 10c. ARMERIA. Maritima. Pkt., 10c.

#### Wilt-Resistant Asters (A)

Giant Crego. The flowers are of immense size, usually measuring from 4 to 5 inches in diameter, and borne on stems 12 inches or more in length. Mixed, all colors. 1/4 oz., 50c; oz., \$1.60; pkt., 10c.

Queen of the Market. The best early Aster, usually in full bloom two weeks before most other sorts begin to blossom. Of graceful spreading habit. Mixed, all colors. ¼ oz., 60c; oz., \$1.75; pkt., 10c.

American Beauty. Late flowering. Mixed colors. ¼ oz., 75c; pkt., 10c.

Heart of France. A dark ruby-red variety; large double flowers, a beautiful type. The most outstanding aster grown. ¼ oz., 80c; pkt., 10c.

Giant California Sunshine. The flowers are large, with loosely placed outer petals contrasting with the creamy yellow or blue centers, giving a lazy effect which is quite delightful. The rogues and off types bloom first and the Giant Sunshine later. Mixed colors; ¼ 0z., 95c; pkt., 10c.

Giant Branching. Mixed colors. ¼ oz., 50c; 1 oz., \$1.60; pkt., 10c.

Double American Branching, Mixed. Pkt., 10c.

ACROCLINIUM, Double Mixed, Pkt., 10c.



Calendula

### Baby's Breath (A)

Graceful plants of fairy-like growth. Large flowering, pure white, of free, easy growth. Much in demand for cutting and combining with other flowers for bouquets and vases. Several sowings should be made during the season to keep up the supply. Oz., 40c; pkt., 10c.

GYPSOPHILA (P) Paniculata. Double white. 1/4 oz., \$1.00; pkt., 10c.

BACHELOR'S BUTTON, Jubilee Gem. Pkt., 10c.



Giant California Sunshine Aster

#### Balsam (A)

(LADY SLIPPER)

Double Camellia-Flowered Mixed. An old and favorite garden flower, producing its gorgeous masses of beautiful colored, double flowers in the greatest profusion. 1½ to 2 feet. Oz., 80c; pkt., 10c.

Bush Mixed, Pkt., 10c.

BLUE LACE FLOWER, Coeruleus, Blue, Pkt., 10c.

#### Calendula (A)

(POT MARIGOLD)

Orange King. The outer petals are slightly imbricated, while those in the center are curved like those of the peony. Color glowing orange. Oz., 75c; pkt., 10c.

The Ball. It has fine stems, immense double flower of a brilliant glisteny orange. A great favorite on the Chicago cut flower market. ¼ oz., 60c; pkt., 10c.

Sunshine. Pkt., 10c.

### California Poppy (A) (ESCHSCHOLTZIA)

Especially valuable for growing in flower beds and masses. Sow where plants are to bloom. Bright showy flowers and feathered foliage. Good for cut flowers. California Mixed. Large flowers. Oz., 50c; pkt., 10c.



California Poppies



Canterbury Bells

### Canterbury Bells (B) (CAMPANULA)

This old-fashioned flower is a favorite with all, stately and showy and of the easiest growth. For best results seed should be sown every year.

Single Mixed. 1/4 oz., 35c; pkt., 10c.

Double Mixed. 1/4 oz., 50c; pkt., 10c.

Calycanthema (Cup and Saucer). 2 ft. June to August. Mixed colors. ¼ oz., 65c; pkt., 10c.



Chinese Woolflower

### Calliopsis (A)

Very graceful border plants, supplying throughout Summer an abundance of elegant, showy flowers which are greatly prized for bouquets and vases. Will thrive anywhere, 6 in, to 2 ft. Double mixed, all colors. Oz., 50c; pkt., 10c.

#### Candytuft (A)

This is one of the most prized garden annuals. Easily grown from seed and does not need transplanting. Fine for cut flowers. Mixed. 1/4 oz., 20c; pkt., 10c.

Giant Hyacinth Flowered. White. Pkt., 10c.

CARDINAL CLIMBER (A). 1/4 oz., 50c; pkt., 10c.

#### Carnations (A)

Always in demand and not hard to grow, being hardy and free flowering. It is one of the most valuable of summer flowers.

Marguerite. Double Mixed. ¼ oz., \$1.00; pkt., 10c. Chabaud Giant Mixed. Pkt., 10c.



Centaurea

#### Castor Bean

(RICINUS) (A)
Decorative plant with fern-like foliage, giving to
the garden a magnificent sub-tropical effect; even
a single plant forms a pyramid of leaves.

Zanzibariensis. Leaves vary in color from light green to purplish red. 1/4 lb., 70c; oz., 20c; pkt., 10c.

#### Celosia (A) (COXCOMB)

Very popular annuals of easy culture, producing large, ornamental, comb-like heads like ruffled chenille. Prized for pots or summer flower beds.

Tall Coxcomb, Mixed. 18 to 24 inches. 1/4 oz., 30c; pkt., 10c.

Chinese Woolflower (Celosia Childsi). Plants grow 2 to 3 ft. high, the bloom starting early with a central head, round and globular, which often reaches the immense size of 2 ft. in circumference. Scores of branches are thrown out, each bearing a ball of scarlet wool. 4 oz., 75c; pkt., 10c.

Plumosa, Dwarf Fiery Feathered. Pkt., 10c. Feathered, Mixed. Pkt., 10c.

#### Centaurea (A)

A very popular annual that will always charm by its simple beauty.

Cyanus (Bachelor's Buttons). 1/4 oz., 20c; pkt., 10c.

Imperialis Mixed. Pkt., 10c.

CHINESE FORGET-ME-NOT. Firmament. Pkt., 10c.

CLARKIA, Double Mixed. Pkt., 10c.

CLEOME, Giant Rose Shades. Pkt., 10c.

### Coleus (A) (FOLIAGE PLANTS)

Bedding plants, growing about 1 foot high. Their foliage is highly ornamental. Easy to raise from seed. Sow seed indoors. Extra large. Choice Mixed. 1/6 oz., \$2.00; pkt., 25c.

### Columbine (P)

This beautiful plant thrives in all kinds of soil; graceful foliage, flowers abundantly from early May until the last of June. Single Mixed, 14 oz., 90c; pkt., 10c.

Imp. Long-Spurred Hybrids. Pkt., 10c.



Columbine-Aquilegia

#### Cosmos (A)

Klondyke, Orange Flare. Orange Flare will flower in the North in less than four months from seed and continue to grow and bloom with increasing freedom until killed by frost. As it is a tropical plant it should not be sown out-of-doors until the ground is warm. Give it a full sun in the garden. Cut flowers should be taken when newly opened with low centers when they will keep several days in water. ½ oz., 25c; 1 oz., 75c; pkt., 10c.

Early Flowering Mammoth, Mixed. Oz., 40c; pkt., 10c.

Giant Mixed. Oz., 30c; pkt., 10c.

Sensation, Mixed. Pkt., 10c.

Early Double Crested, Mixed. Pkt., 25c.



Coreopsis

#### Coreopsis (P)

This is one of the finest of hardy plants, with large, showy, bright yellow flowers produced in the greatest abundance from June until frost. As cut flowers they stand near the head among hardy plants. Oz., 40c; pkt., 10c.

#### Cypress Vine (A)

For trailing upon a light ornamental trellis the Cypress Vine cannot be excelled. It has a profusion of scarlet or white star-shaped blossoms, and finely cut foliage. Mixed. Oz., 75c; pkt., 10c.



Cosmos, Klondyke Orange Flare

DAHLIA, Unwin's Dwarf Hybrids. Pkt., 10c.

### Double Daisy (P) (BELLIS PERENNIS)

A favorite low growing spring flowering plant. Loves a shady place and rich soil. 6-8 in. Double choice mixture. 1 oz., \$12.00; ¼ oz., \$4.00; pkt., 10c.

### Delphinium(P) (PERENNIAL LARKSPUR)

Blackmore and Langdon Strain. Tall, graceful spikes of bloom, covered from top to bottom with captivating blooms in charming color combinations. All the clear shades of blue with many opaline variations. 3/4 oz., \$1.25; pkt., 25c.

Pacific Giants, Mixed. This new strain produces plants that are 60-65 per cent mildew-resistant. The flowers are immense size, tightly set on straight stems. The flowers do not shatter and are fine for cut flowers. ½ oz., 82.65; ½ oz., 84.75; pkt., 50c.

Gold Medal Hybrids. An excellent selection of hybrid Delphinium. Many of them are double flowers and range in color from pale lavender to indigo-blue. 1/4 oz., 60c; pkt., 10c.

Chinese Perennial Mixed. Pkt., 10c. Azure Fairy. Pkt., 10c.

### Forget-Me-Not (B)

They are considered among the best spring flowers. They prefer moist, cool soil, and will bloom freely in fall and early spring.

Victoria. Sky-blue. (Not available).
Victoria Rosea. Pink. (Not available).

### Four O'clock (A)

Marvel of Peru. Mixed colors. ¼ lb., 90c; oz., 35c; pkt., 10c.



Gaillardia



Delphinium-Larkspur

### Foxglove (B)

Bearing long spikes of beautifully colored flowers; fine for planting in hardy borders or among shrubbery. Mixed. 1/4 oz., 50c; pkt., 10c.

### Gaillardia (A) (BLANKET FLOWER)

Picta Lorenziana. Double flowers, mixed colors. Oz., 80c; pkt., 10c.

### Gaillardia (P) (BLANKET FLOWER)

Bloom from June to October. Their long flowering period, long stems and bright colors make these one of the most valuable perennials, being easily grown in beds and borders.

Grandiflora. Mixed, single. 1/4 oz., 30c; pkt., 10c.

GEUM, Double Scarlet. Pkt., 10c.

GOURDS, Small Fruited Mixed. Oz., 15c; pkt., 10c.



Forget-Me-Not

HELIOTROPE. Dark varieties mixed. Pkt., 10c. HESPERIS. Purple or white. Pkt., 10c. HISBISCUS. Pkt., 10c.

#### Hollyhocks (P)

Make a fine row in the garden and an excellent background to cover a high wall or fence. 6 to 8 ft.

Double Mixed. Double and semi-double. 1/4 oz., 65c; pkt., 10c.

HOLLYHOCK, Indian Spring. Pkt., 10c. HUNNEMANNIA. Pkt., 10c. ICELAND POPPY, Sunbeam Mixed. Pkt., 10c. KOCHIA Childsi. Pkt., 10c. LANTANA. Pkt., 10c.

#### Larkspur (A)

The graceful spikes of blooms are much valued for

vases. They continue long in blooms.

Double Mixed. All colors. ¼ oz., 30c; oz., 90c; pkt., 10c.

Giant Hyacinth-Flowered. Mixed. 3 feet. Derives its name from the striking resemblance of the flowers name from the striking resemblance of the howers to the Double Hyacinth. Delicate colors. ¼ 0z., 40c; oz., \$1.10; pkt., 10c.
Rosamond. Deep pink. Pkt., 10c.
Super Majestic. Pkt., 10c.

Super Majestic. Pkt., 16 Salmon Rose. Pkt., 10c. Blue Spire. Pkt., 10c. White King. Pkt., 10c. Majestic Rose. Pink. Pkt., 10c.

FOR PERENNIAL VARIETIES, see DELPHINIUM

LAVENDER. Pkt., 10c. LOBELIA, Crystal Palace. Pkt., 10c. LUNARIA, Biennis. Pkt., 10c. LUPIN, Perennial Mixed. Pkt., 10c.

#### Marigold (A) (TAGETES)

Huge flowers with a color range Sunset Giants. Sunset Glants. Huge nowers with a color range through orange, yellow and primrose. A tall variety and a beauty. ¼ oz., 40c; 1 oz., \$1.00; pkt., 10c. Guinea Gold. 2 to 2½ feet. An unusual type of Marigold, color orange flushed with gold. Nearly all flowers are double or semi-double and their odor is less pungent than that of other Marigolds. Oz., 90c;

1/4 oz., 30c; pkt., 10c. Yellow Supreme. A large, fluffy, well rounded bloom Yellow Supreme. A large, flutly, well rounded bloom of delicately milk-honey fragrance, with broad, loose frilled petals of a rich, creamy lemon color. Plants are practically free from the objectionable Marigold odor. Oz., 90c; ¼ oz., 30c; pkt., 10c. Double Tall African. ¼ oz., 25c; oz., 75c; pkt., 10c. Double Dwarf French. ¼ oz., 20c; oz., 60c; pkt., 10c. Gold Medal Blend. Pkt., 10c.

Harmony, 12 to 14 inch. An annual dwarf French Marigold having scabious-like flowers of deep orange with maroon collars of broad petals, crested centers. Usually free flowering and very early. (Pictured in colors on our inside back cover). 1/4 oz., 35c; oz., \$1.00; pkt., 10c.



Yellow Supreme Marigold



Double Hollyhocks

MARIGOLD, Burpee Gold. Pkt., 10c. MATTHIOLA. Pkt., 10c.

#### Mignonette (A)

Machet. The best for all purposes. Of dwarf habit, with very large red flowers and handsome foliage. ¼ oz., 25c; pkt., 10c.

MOMORDICA, Mixed. Pkt., 10c.



Giant Hyacinth-Flowered Larkspur



Morning Glory, Giant Cornell

### Morning Glory (A)

(CONVOLVULUS)

Deservedly very popular as they are one of the most free flowering and rapid growing plants in cultivation; the beauty and delicacy of their brilliant flowers are unsurpassed. Soaking the seed in warm water for an hour or two hastens germination.

Common, Mixed. Oz., 25c; pkt., 10c. Japanese, Mixed. Oz., 50c; pkt., 10c. Heavenly Blue. Oz., 50c; pkt., 10c. Scarlett O'Hara. Oz., \$1.15; pkt., 15c. Pearly Gates. Oz., \$1.15; pkt., 15c. Crimson Rambler. Pkt., 10c. Giant Cornell. Red with white edge.

Giant Cornell. Red with white edge. The best red large flowered Morning Glory. Pkt., 15c.



Scabiosa (Mourning Bride) A-Listed on Page 42

MOONFLOWER. Pkt., 10c.

#### Nasturtiums (A)

For ease of culture, duration of bloom, brilliancy of coloring and general excellence, nothing excels them. All they need is a moderately good soil, in a well drained sunny position, and within a few weeks from the time they are sown until hard frost comes there is an endless profusion of blossoms.

Dwarf, Mixed. Oz., 25c; pkt., 10c.

Tall, Mixed. Oz., 25c; pkt., 10c.

Scarlet Gleam. Plain petaled and deep throated. This is a sweet scented variety similar to Golden Gleam. Oz., 30c; pkt., 10c.

Golden Gleam. An attractive, double-flowered, sweetscented variety adapted to culture as a bedding or pot plants. Also valuable for cut flowers. Oz., 30c; pkt., 10c.

Double Glorious Gleam Hybrids. These hybrids are a collection of gorgeously colored, large, well formed flowers of such dazzling beauty and colors that were never dreamed of before in a double nasturtiums. Mixed colors. Oz., 30c; pkt., 10c.

NEMESIA, Triumph Mixed. Pkt., 10c.

NICOTIANA, Evening Star. Pkt., 10c.

OENOTHERA. See Primrose. Pkt., 10c.



### Pyrethrum (P) (PAINTED DAISY)

One of the most valuable of our early summer flowers. Charming colors and wonderful lasting properties as a cut flower. Flowers in May and June and frequently in August and September; in all shades of rose and pink. Height 1 to 2 feet.

Roseum. Single mixed. 1/4 oz., \$2.50; pkt., 10c.

### Petunias(A)

For freedom of bloom, variety of color and effectiveness these have no equal. If only a little care is bestowed upon them, they will produce their hand-some, sweet-scented flowers in their delicate and gorgeous colors throughout the whole summer and bloom

profusely until killed by hard frosts.

The Petunia loves a rich soil and thrives best in a sunny location. Pinch back freely. This causes the plants to branch out and spread, shading the ground, thereby helping to conserve the moisture. Keep the faded flowers clipped.

#### Single Giant Flowering Varieties

The flowers of this strain average five to seven

inches across and are wonderful.

Giants of California Mixed. The flowers are very

large and the colors embrace every conceivable shade of shade of crimson, w 1/8 oz., \$8.00; pkt., 25c. white, violet, lavender, etc.

Balcony or Trailing. (15 in.) To droop over the edge of a window box or to overhang a terrace, these are the best Petunias to select. In their several colors the single flowers are very gay either alone or in

combination.

combination.

Balcony Black Prince. Deep velvety mahogany-red, black throat. ¼ oz., \$1.75; ½ oz., \$1.00; pkt., 25c. Balcony Blue. Deep violet-blue. ¼ oz., \$1.50; pkt., 15c. Balcony Rose. Vivid rosy pink. ¼ oz., \$1.25; pkt., 15c. Balcony Mixed. Several colors. ¼ oz., \$1.15; pkt., 15c. Special Mixture of Dwarf Small-Flowering Varieties. Includes all the varieties listed and many others, and will be a reveleation to those who plant a packet in furnishing an unending supply of flowers in a most bewildering combination of colors as long as the summer lasts. 1/4 oz., 80c; pkt., 10c.

Celestial Rose. An improvement on the Rosy Morn.

More compact in growth and deeper in color. A beautiful rich satiny rose. 1/8 oz., 50c; 1/4 oz., 95c;

pkt., 10c

Petunia Violacea. Deep violet, compact. ¼ oz., \$1.10;

pkt., 15c.

pkt., 15c. Silver (Heavenly) Blue. Pkt., 10c. Howard's Star. Pkt., 10c. White King. Pkt., 10c. Glow. Pkt., 25c. King Henry. Pkt., 25c. Giant Ruffled and Fringed. Pkt., 25c.

Double Fringed Dwarf Max, Mixed. Pkt.,

Dwarf Max. Double Fringed. Mixed. Pkt., \$1.25.

Dwarf Max. Double Fringed.
Salmon Supreme. Pkt., 25c.
Hollywood Star. Pkt., 25c.
Rose King Improved. Pkt., 10c.

Cream Star. Dwarf. Pkt., 10c. First Lady. Dwarf. Pkt., 25c.

Rose Bedder.

dder. Dwarf. Pkt. 10c. Mixed. Pkt., 10c. Midget.



Double Fringed Dwf. Max. Mixed



Rosy Morn Petunia

Rosy Morn. The plants are bushy and compact, flowers of medium size, produced in great abundance the entire summer and fall; are of a most pleasing clear pink, contrasted by a broad white throat. A splendid sort for porch boxes,

> pkt., 10c. ELKS PRIDE (Royal Purple). Flowers of extraordinary size, averaging to 4 in. across. Superb single flowering of a rich velgre nowering of a rich velvety color, so much in demand for hanging baskets, porch boxes, etc. 1/16 oz., \$2.50; pkt., 25c.
>
> Rose of Heaven. Select rich rose.
>
> Oz., \$2.00; ½ oz., 60c. pkt. 10c.

pots and beds. Oz., \$1.95; 1/4 oz., 60c;

60c; pkt., 10c.



Single Petunia, Royal Purple



Garden Pinks

#### Pinks (P)

(DIANTHUS)

Double. Selection of the best double Pinks in cultivation. Flowers ranging in color through all the brightest and most brilliant shades. 1/4 oz., 75c; pkt., 10c.

#### Phlox (A)

The annual Phloxes are dazzling in effect, particularly so when sown in masses or ribbon beds of contrasting colors. Few flowers are so easy to grow from seed, so pretty and compact in habit, so quick to bloom, or give such a brilliant display of color for so little cost or care.

Phlox Drummondi. Unsurpassed for variety of colors. Flowers are smaller than those of the large flowering varieties. Mixed. ¼ oz., \$1.20; pkt., 10c.

Scarlet, Large Flowering. Pkt., 10c.

Phlox Decussata. (Perennial.) 1/4 oz., \$2.00; pkt., 10c.



Oriental Poppies

#### Oriental Poppies (P)

These should be sown in early spring in the open ground as soon as it is fit to work. The plants disappear during July and August appearing again as soon as the weather gets cool. It is well to mark the place with a stick so the roots will not be disturbed during the resting period. When the fall growth starts they should be transplanted to their permanent flowering quarters. Flowers of immense size, 6 inches and over, of many novel colors.

Hybrids, New Mixture. 1/4 oz., 75c.; pkt., 10c. PRIMULA, Primrose. Pkt., 10c.



Phlox Drummondi

#### Poppies (A)

Should be sown as early in the spring as possible, where they are to remain, as they will not stand transplanting. Sow very thinly; they must not stand nearer than 5 or 6 inches apart if you wish best results.

Shirley, Single. Lovely and dainty shades, many edged and shaded with other colors. Oz., 35c; pkt., 10c.

Shirley, Double. Beautiful double satiny flowers in shades of white, pink and old rose with white centers. Oz., 60c; ¼ oz., 25c; pkt., 10c.

American Legion. Pkt., 10c.

Double Shirley, Sweet Briar. Pkt., 10c.

#### Pansies (B)

They like a cool, moist soil and protection from the wind as well as the noon-day sun. Seed should be sown in the house and transplanted when danger of frost is over. For large flowers, early in the spring, the seed should be sown in August or September and the plants protected with a cold frame during the winter. May also be sown out-of-doors in the spring for late summer and fall flowers.

Improved Swiss Giants. The flowers are of gigantic size, perfectly round, fine substance of flower and good form of plant. They bloom early in the spring, continuing in flower all summer until late in the fall. 1/4 oz., \$3.00; 1/2 oz., \$1.75; pkt., 10c.

Giant Mixture, Donovan Strain. Flowers very large, and great diversity of colors. This mixture contains all the good ones. Oz., \$7.00; pkt., 10c.

Superb Giant Mixed, Pkt., 10c.



Pansies



Portulaca-Rose Moss

#### Portulaca (A) (ROSE MOSS)

This plant will grow and bloom profusely in dry, hot situations, where almost any other plant would soon die. Easily transplanted. In sowing mix the seed with dry sand to insure an even distribution. Sow in May when the ground is thoroughly warmed, and soon the loveliest of floral carpets will appear. Double Best Mixture. 4 oz., \$1.25; pkt., 10c. Single Mixed. 4 oz., \$1.00; pkt., 10c.



Salpiglossis

Primrose, Showy Evening. Pkt., 10c. Primula, Malacoides, New Baby. Pkt., 25c. RANUNCULUS. Pkt., 10c.

#### Salpiglossis (A)

Undoubtedly one of the most attractive annuals and Undoubtedly one of the most attractive annuals and should be in every garden. The blossoms are tube-shaped, much like a Petunia but rivaling the latter in the beautiful colors displayed. Nearly every flower is veined with a glint of gold. Flowers are large and last well in water, really better than on the plants. Large Flowering Mixed. ½ 0z., 35c; pkt., 10c.

#### Salvia (A) (FLOWERING SAGE)

A hedge or bed of Salvias is a blaze of color during late summer and fall, bloom in spikes and continuing to bloom until killed by hard frosts. Seed should be started indoors, sow about 1/4 inch deep; transplant when soil is well warmed, about 12 to 18 inches apart.



Salvia, Fireball

Splendens. 2½ ft. The well known variety, fiery scarlet. Oz., \$4.00; ¼ oz., \$1.25; pkt., 10c. Bonfire. Pkt., 10c. Farinacea. Blue. Pkt., 15c.

#### Scarlet Runner (A)

A very rapid grower, bearing large sprays of bright scarlet, pealike flowers from early summer to late fall. Oz., 25c; pkt., 10c.

#### Shasta Daisy (P) (CHRYSANTHEMUM LEUCANTHEMUM)

Grows very bushy, bearing all summer a profusion of immense white flowers on long stems. 1/4 oz., 40c; pkt., 10c.

#### SCABIOSA.

(Mourning Bride) (A) Grandiflora Mixed. Ou Our latest special mixture and we are sure the and we are sure the delicate soft colors will be admired by all our friends. Pictured on page 39. ½ oz., 25c; pkt., 10c. Blue Moon. Pkt., 10c. Caucasica. Lavender-blue. Pkt., 25c.

Pkt., 25c. SENSITIVE PLANT. Pkt.,

10c. SCHIZANTHUS. Dr. Badger. Pkt., 10c.



Shasta Daisies

#### Rust-Proof Snapdragon (A) (ANTIRRHINUM)

For gorgeous coloring few flowers can match Snapdragons. The flowers are of very large size, very fragrant, and are produced on immense long spikes, which render them well adapted for cut flowers.

Dwarf Mixed. 1/4 oz., 90c; pkt., 10c.
Tall Mixed. 1/4 oz., 90c; oz., \$2.70; pkt., 10c.
Giant Bedding Pink. R. R. Pkt., 10c.
Giant Bedding White. R. R. Pkt., 10c.
Giant Bedding Wellow. R. R. Pkt., 10c. Giant Bedding Mixed. R. R. Pkt., 10c.



Snapdragon

#### Stocks (A)

Ten Weeks Large Flowering. The favorite sort for bedding. Grows about 1 ft. high. Mixed, all colors, 14 oz., 75c; pkt., 10c.

Giant Perfection or Cut-and-Come-Again, Useful for outdoor bedding as well as for pots or cut flowers. They throw out numerous side branches, all bearing double, fragrant flowers. Height, 18 in. Mixed, ¼ oz., 75c; pkt., 10c.

Mammoth Beauty of Nice, Mixed. Pkt., 10c. Giant Imperial Crimson. Pkt., 10c.

Giant Imperial Crimson, Pkt., 10c. Giant Imperial Purple, Pkt., 10c. Giant Imperial Golden Rose. Pkt., 10c.

#### Sunflower (A) (HELIANTHUS)

Of easiest culture. Suitable for backgrounds, screens, and to plant among shrubbery. It blooms from June till frost. 3 to 6 feet.

Double Chrysanthemum-Flowered. Large, golden yel-

low flowers, resembling a chrysanthemum. Oz., 35c; pkt., 10c.

Red and Gold. Pkt., 10c.

SNOW-ON-THE-MOUNTAIN. Pkt., 10c.

STATICE, Mixed. Pkt., 10c.



Sweet William

#### Strawflower (A) (HELICHRYSUM)

An ornament to the garden when growing, and are prized everywhere for the winter decoration of vases, and for durable bouquets. Flowers intended for dryand all durable bouquets. Flowers intended for dry-ing should be gathered when partially unfolded and suspended with their heads downward in a cool place. Mixed, all colors. Oz., \$1.00; pkt., 10c. SWEET SULTAN. Pkt., 10c.

#### Sweet William (P)

This sturdy, reliable old-fashioned favorite is still a source of delight in the garden of today. Seed may be sown at any time from spring to midsummer. The charm of the great trusses of lovely color seems to be lost when it is planted as a mixture in masses. It is best if you give slight protection during the winter. It likes warm yield soil of the state of the stat

It likes warm, rich soil. 2 feet.

Single, Finest Mixed. A very choice assortment of all the best single flowered varieties. ¼ oz., 50c;

pkt., 10c. Double Mixed. This mixture you will find of superior quality, containing all colors and shades. ¼ oz., 60c; pkt., 10c.
Single Early Flowering, Dwarf Midget Mixed. 6 inches

A dwarf variety ideally adapted for early flowering, and for the perennial border as well as pot plants. 1/4 oz., \$2.50; pkt., 10c.

TEXAS BLUE BONNET. Pkt., 10c.



Ten Weeks Stocks

# Beautiful Sweet Peas

To grow Sweet Peas successfully it is necessary to plant EARLY and give plenty of moisture. They should go in the ground as soon as the ground can be worked and should be planted six inches deep, being covered at first with only two inches of soil, the trench being filled as the plants grow. It is best to soak the seeds for several hours before they are planted. If this plan of planting early is followed, and if the Sweet Peas are kept mulched with peat moss, lawn clippings or else watered abundantly, they will certainly give a fine crop of lovely flowers held in admiration by every flower lover. The mixture we give you below will give you color in profusion and is well worth your consideration.

#### Superb Spencer Mixed

A great many people prefer to grow Sweet Peas in the mixed colors. Our superb Spencer Mixture is made up of all the best varieties obtainable. The greatest care is taken to insure a well balanced range of colors and worthy of a place in any garden. Pkt., 10c; oz., 20c; ½ lb., 50c; 1 lb., \$1.60, postpaid.



Gigantic



Fluffy Ruffles

# Summer Flowering Spencer Varieties

We give you below the best of the Spencer varieties in a range of individual colors for those who want to work out a color scheme. Each one is a rare beauty and worthy of a place in your garden.

Ambition. Rich deep lavender.

Fluffy Ruffles. Rich rose-shaded salmon and cream duplexed.

Gigantic. Largest and best of the whites.

Mary Pickford. Dainty cream-pink, suffused salmon.

Mrs. Tom Jones. Bright blue.

Crimson King. Rich deep clear crimson.

Any of the above: Oz.,  $25c; \frac{1}{4}$  lb., 85c; pkt., 10c. Heat Resistant Mixed. Pkt., 10c.

Perennial Sweet Pea (Lathyrus latifolius). Oz., \$1.00; pkt., 10c.



Verbena (A)

One of our trustworthy garden companions. Of trailing habit. The foliage makes a perfect carpet and a fine background for the broad, flat flower heads of many brilliant colors. Sow in boxes in the house and transplant when the seedlings are an inch high, and set outside after danger of frost is past in a warm, sunny, spot.

in a warm, sunny spot.

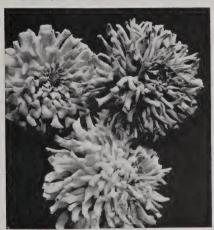
Mammoth Mixed. Producing in handsome umbels, flowers of large size in beautiful shades of white, rose, scarlet, blue and purple. Oz., \$1.00; ½ oz., 30c;

pkt., 10c.

Scarlet (Defiance). Pkt., 10c.

Wild Cucumber (A)
(ECHINOCYSTIS LOBATA)

This is the quickest growing climber in our list. It is thickly dotted over with pretty, white, fragrant flowers, followed by an abundance of ornamental and prickly seed pods. ½ lb., 75c; oz., 25c; pkt., 10c.



Zinnia, Fantasy

VIOLA, Blue Perfection. Pkt., 25c. Jersey Gem. Pkt., 25c. Mixed. Pkt., 10c.

WHITLAVIA. Pkt., 10c.

VINCA, Rosea. Pkt., 10c.

VIRGINIAN STOCK, Mixed, Pkt., 10c.

WALLFLOWER, Double Mixed. Pkt., 10c.

WILD GARDEN MIXTURE. Pkt., 5c.

### Zinnias (A)

Splendid hardy annuals making a brilliant profusion of color and succeeding well in any soil. They will retain their beauty for several weeks and bloom until frost.

Fantasy. This new Fantasy mixture with rounded flowers is composed of a mass of shaggy, raylike petals which give a delicate and refined appearance to the medium sized double flowers. They lend themselves gracefully to flower arrangements. The color range includes the brightest shades of red and orange, as well as the popular pastel pinks and cream. 1/4 oz., 35c; oz., \$1.00; pkt., 10c.

Double Fantasy Mexicana Hybrid. Pkt., 10c.

Colossal or Giant Flowered. The flowers are gigantic in size; thickly set with velvety petals. The plants are vigorous, branching freely and are fine for cutting. Mixed colors, Oz., 60c; pkt., 10c.

Giant Double Lavender. Pkt., 10c.

Giant Double Purple. Pkt., 10c.

Giant Double Crimson, Pkt., 10c.

Giant Double Rose. Pkt., 10c.

Giant Double Yellow. Pkt., 10c.

Giant Double Orange. Pkt., 10c.

Giant Double Pink. Pkt., 10c.

Giant Double White, Pkt., 10c.

Giant Dahlia Flowered. In formation the broad petals are closely imbricated, sometimes seeming almost to be piled one upon the other. The flowers often measure 4 inches in depth and 6 to 8 inches in diameter. In general appearance the flowers compare with the Show Dahlias. Mixed colors. ½ lb., \$2.50; oz., 70c; pkt., 10.

Dahlia-Flowered Crimson. Pkt., 10c.

Dahlia-Flowered Orange and Gold, Pkt., 10c.

Dahlia-Flowered Scarlet. Pkt., 10c.

Lilliput Double, Mixed, or "Pompon." 12 inches. The plants form handsome little bushes and fairly bristle with tiny, short-stemmed, very double flowers hardly exceeding a daisy flower in size. They are pretty plants. Oz., 60:; pkt., 10c.

Indian Summer Giant Mixture. Pkt., 10c.

All Giant Pastel Mixture. Pkt., 10c.

Creeping Zinnia. Pkt., 10c.

Cupid Tiny Tim. Pkt., 10c.

All prices quoted herein are subject to available stocks on hand, and subject to change without notice.

### FIELD SEEDS



ganizations, and certified by the proper State officers in the state where grown, and guaranteed by them. Write for prices. ALFALFA, Common Grown in Utah. The fields from which this seed was grown were carefully inspected. The beautiful golden color; free from dodder and all foul seeds. Scarified and carefully tested for germi-

nation. The high altitude of the mountain states insures hardiness. Write for prices.

Hardigan Alfalfa Was developed in Michigan and has varieties because of its hardiness and heavy yielding ability. For the past four years it has been the outstanding variety in comparative tests in trials at the Michigan Experimental Station at East Lansing. The only reason Hardigan Alfalfa has not been grown more extensively was the lack of sufficient supply of seed. Write for prices.

Medium Red or June Clover By far the most important purposes. It is a perennial, and grows about two feet high yeary valuable for plowing under to enrich the soil, adding humus and nitrogen. Sow in spring or fall, eight to twelve pounds per acre, if used without other grasses.

Mammoth or Large Red Clover

Mammoth or Large Red Clover Mammoth Clover is medium, growing to nearly twice its size; is coarser and a little later. It can be grown successfully on poorer soil than

Medium Clover. It is used extensively for building up worn-out land. Sown alone, use eight to twelve pounds per acre.

Alsike Clover A perennial and the most hardy of all extremely leafy, making hay of a fine texture. Does not readily winter-kill, and is valuable to sow with other Clovers and grasses, as it increases the yield of hay. It is the best Clover for moist soil. Sow either in spring or fall, about six pounds per acre, when sown alone.

White Blossom Sweet Clover Once considered a noxious weed; now nearly equal in value to alfalfa. White Sweet Clover is a biennial, and in Value to alfalfa. Write sweet Clover is a blenniar, and does not last so long as its cousin, alfalfa, but it has a great mission. In pasture it will produce a greater flow of milk than even alfalfa, and as much feed. Cattle are less liable to bloat. Stock soon learn to like the hay, and even prefer it to alfalfa. Write for prices.

YEARS OF SERVICE When ordering, Always state name of seed.

#### **ALFALFA**

Sweet, Bur, Hubam Clovers Retail Size 1 bu. each.....\$ .50 2½ bu. each.....1.00

#### **CLOVERS** Medium & Mammoth Red

Alsike, Crimson & White Clovers

1 bu. each.....\$ .50

2½ bu. each......1.00 **LESPEDEZA** 100 lb. size (Inoculates up to 100 lbs.) ea.....\$ .50

#### PEAS (All Varieties) **VETCHES** (All Varieties)

100 lb. size (Inoculates up to 100 lbs.) ea.....\$ 1200 lb. size ea..... 5.70 (12-100 lb. cans)

#### SOYBEANS

Size Retail Small (Inoculates up to 

#### BEANS-Navy, Pinto, String, Wax, Kidney

1 bu. each.....\$ .35

#### PEANUTS, LIMA **BEANS, COW PEAS**

Sma	all (Inoculates up to
120	lbs. seed)\$ .30
5	bu. each55
25	bu. (One can) 2.50
30	bu. (6-5 bu. cans) 3.25
	(. ,

#### LUPINES (All Varieties)

100 lb. size (Inoculates up to 10? lbs. seed) ea.....\$ .50

GARDEN SIZE-Peas, Beans, Sweet Peas, Lupines Enough for B lbs. seed - Retail Price 10c each

### Certified SEED CORN

#### Early Yellow Varieties-Michigan Grown

These varieties are adapted for Michigan as they are early maturing and heavy yielding which will insure you high quality Corn. Seeds grown too far south are generally a risk in Michigan climate. Our northern grown seeds are better adapted to this climate and growers who expect to grow Corn at a profit will realize the importance of good seed Corn such as we offer.

Certified Golden Glow is an early maturing yellow Dent Corn. The stalks grow 6 to 8 feet tall and bear ears of deep yellow, 7 to 8 inches long. The kernels are nearly square and the cobs a deep red. Ripens normally in 90 days. This seed is grown in Michigan and certified by the Michigan Crop Improvement Association.

Certified Pickett's Yellow Dent. A reliable 90-day Corn. The ears are long and somewhat slender, with a small dark red cob. The kernels are slightly rough and rather deep. This is also Michigan grown seed and certified by the Michigan Crop Improvement Association.

#### **Standard Yellow Varieties**

Early Murdock—90 days. Golden Glow—90 days. Early White Cap Yellow Dent—100 days. Pickett's Yellow Dent—90 days. MAC Yellow Dent—90 days. Pride of the North—95-100 days. Longfellow Flint or Smut Nose—95-100 days.

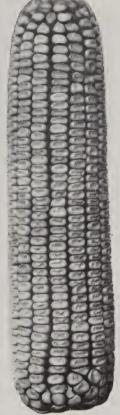
All the above varieties have been grown with success in Michigan, being early and adapted to the soil and climatic conditions. They will generally mature before frost, and we recommend any one of them.

#### HYBRID CORN INCREASES THE YIELD

We will have all the varieties that are usually adapted to Michigan, such as KINGCROST and PFISTER, as well as other adapted varieties.

### Fodder and Ensilage Corn

Dry Fodder Corn is the most satisfactory substitute for hay. It nearly, if not quiet, equals in feeding value timothy and clover. All stock eat it greedily and thrive on it.



Leaming Fodder Corn

This variety is preferred by most dairymen for filling silos, for the reason that the corn matures the large ears (in an ordinary season it will ripen), and gives more grain in the ensilage. Stalks very large and leafy, and grows an immense amount of forage to the acre. It requires from one peck to one-half bushel of seed per acre, drilled in rows one way.

Red Cob Ensilage

A gigantic Southern white Corn, producing immensely large ears, rarely maturing in this latitude. The stalks grow from 12 to 15 feet in height, with long, broad leaves from the ground to the tassel. Stalks very thick at the butt, juicy, tender and as sweet as sugar corn; and all stock eat it with relish. Many darrymen prefer it for the silo, for the reason that it produces such an enormous amount of silage (from 15 to 25 tons per acre). It is especially valuable for the dry fodder when cut and kept in the shock until fed. It will produce a good crop of forage, even when sown as late as July.

#### Eureka Ensilage Corn

Will produce more tons of Silo Corn per acre than even Red Cob Ensilage Corn. Stalks will grow 12 to 15 feet in height, with broad leaves from the ground up. Each stalk will bear from one to three long ears. Very rapid grower and can either be planted in hills or in drill rows.



### FIELD AND FARM SEEDS



udan Grass

#### Timothy

The most important of all grasses for hay, and is adapted to a wider range of conditions than any other variety of grass. It is the hardiest of all grasses and excels in feeding value, Sow early in the spring or fall, 10 to 12 pounds per acre if sown alone; less if mixed with other grasses.

#### Orchard Grass

This grass grows well in the shade, is rather rank in growth and a stooling variety. Stands the drought remarkably well. Valuable for pasture or orchard. Does well in wet or poor ground and produces large crops of hay.

#### Sudan Grass

A tall annual grass reaching the height of 7 to 9 feet when planted in rows and cultivated, and 4 to 6 feet when sown broadcast. The hay is greatly relished by all stock, and has exceptionally high feeding value. Is adapted to most soils.

Reed Canary Grass

Reed Canary Grass is rapidly becoming popular for the reason that it can be grown in soil too wet for other crops. It is a heavy yielder and after well established may be cut two and three times within one season. It is a hardy perennial and will live until it is broken up, and will not spread to cultivated lands. When possible, the land should be plowed in the fall and seed may be sown in October on lend that way. and seed may be sown in October on land that may be too wet in the spring. It is very slow to germinate, therefore will remain dormant until spring. In the

therefore will remain dormant un spring, sow as early as possible to get ahead of the weeds or late in June or July. Best results are ob-tained by broadcasting at the rate of 5 to 6 lbs. per acre or drill in rows 16 to 18 inches apart. Under favorable conditions seeds will germinate in about 35 or 40 days.

#### Certified Spartan Barley

A heavy yielder, smooth bearded type, two rowed. It has been grown in Michigan for the past six years and is becoming very popular. The straw is vigorous and of good length, also does very well on lighter soils. The kernels are plump and nearly twice the size of those of the six rowed barley. It will ripen a week or ten days earlier than other varieties and, for the best results, it should stand until thoroughly ripened. This seed certified by the Michigan Crop Im-provement Association.

#### Brome Grass (Bromus Inermis)

Very strong, quick growth making two crops of very abundant pasture. It prevents washing on the banks of streams. Good in very sandy soils because of its strong spreading root system. Not a lawn grass. Sow in the spring, 2 bushels per acre. (14 lbs. to a bushel).

Korean Lespedezas (Japan Clover)
The earliest of the annual Lespedezas and especially adapted for Michigan climate or similar latitudes. It comes up early in the spring and grows rapidly, furnishing much earlier pasture than any other variety. The leaves are larger but more rounded than Common Lespedeza, commonly grown in the South. It begins flowering in July and is a wonderful soil builder as it can be grown on the poorest land. Korean is especially suited for a short growing season. The seed ripens in September.

#### Amber Cane

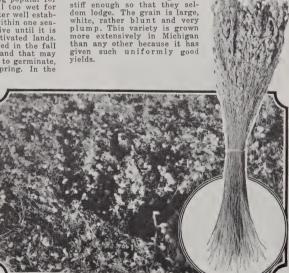
The earliest Non-Saccharine type in cultivation. Stalks tall and slim. Most suitable for hay as it matures very quickly.

#### Soy Beans

When clovers fail it is necessary to have an emergency hay crop which will make hay the same season it is planted. For this purpose Soy Beans are better than the Millet. Soy Beans should be planted in May or June. They withstand drought remarkably well. For hay, silage or green manure crops, plant 1 bushel to an acre if drilled, if planted with a corn planter ½ bushel is sufficient. "Ito San" is one of the best varieties as it matures in 100 days. The plant stands erect, growing 2 to 2½ feet high and is a good yielder. The "Manchu" is the most popular, however, in all northern sections. It is early maturing and is of a stoutbushy growth, standing erect. Excellent for hay and forage crops. When clovers fail it is necessary to have an emer-

#### Certified Wolverine Oats

Michigan grown. These oats are medium early, strong and vigorous growers, heavy yielders. The head is full and loose with the seeds evenly distributed around the stem. The straw is of medium height and



horean Lespedeza

#### FIELD AND FARM SEEDS-Continued

#### Millet

A few acres of Millet will yield half again as much hay per acre as either clover or timothy, besides it has a greater feeding value and any stock raiser or dairy farmer would be well repaid. When spring weather is unfavorable, so that other crops fail, or the season is late and wet so that corn will not mature, Millet is a sure crop. Millet should be sowed 3 pecks per acre, from May to August.

GERMAN OR GOLDEN MILLET. Grows very rank and is one of the best varieties for hay and fodder. While the hay may seem coarse, nevertheless, it is quite tender if it is cut when in full bloom and even hogs will eat the cured hay quite greedily. A yield of 5 tons per acre is nothing unusual. German Millet will withstand dry weather remarkably well.

HUNGARIAN MILLET. Is preferred by some to Golden Millet as it is about a week earlier. Does not grow as large but the hay is more desirable because it is not so coarse. Very nourishing and a wonderful milk producer. A good variety for moist soils.

#### Dwarf Essex Rape

Under favorable conditions Dwarf Essex Rape is ready for pasture in six weeks from the time of sowing. One acre of good rape will carry n flock of a dozen sheep for two months. Recent experiments have shown rape to be the means of producing pork at the lowest cost, even less than alfalfa. Rape is also the forage that can be sown with the least effort. Seeded in corn at the last cultivation to be hogged down, furnishes one of the greatest money-making methods known to the progressive farmer today. Sow rape in corn at the rate of 4 lbs. per acre. When the corn is harvested and cut, then turn the pigs into the field in the Fall.

#### Sand Vetch

Sand or Hairy Vetch shares with Sweet Clover the homor of giving the best results in restoring fertility to wornout land or making poor, sandy soils productive. Sand Vetch has no equal as a cover crop. It can be sown in the cornfield just after the last cultivation, and it will make a mass of green stalks and leaves to plow under about the middle of May; or it may be sown after harvesting oats and plowed for corn the next Spring. Hay made from Sand Vetch is about three per cent higher in protein than Alfalfa hay, and is more eagerly eaten by stock. When sown with oats or any Spring grain, it will come on after crop is harvested and make splendid Fall pasture, and can be plowed under the next Spring for corn or potatoes. Sow from 30 to 40 pounds per acre.

#### Silverhull Buckwheat

A standard variety, largely grown, and gives excellent satisfaction. Unsurpassed as a catch crop when a late season has made it impossible to follow out your first plans or when other crops fail. Buckwheat is a valuable crop for those parts of the farm which always seem to be left unplanted at the close of the season. It is generally sown in July and will fill up the vacant plots at a time when all other planting is past. Can be sown after a crop of Winter Wheat or Rye and make a second crop. Use one-half to three-quarters bushel of seed to an acre.

#### Canadian Field Peas

Valuable for northern climates for cattle feed and when sown with oats make an excellent hog feed. Should be sown early in April, two bushels to an acre. If sown with oats for hay and fodder sow 1½ to 2 bushels per acre.

### Farm Fertilizers

Commercial fertilizers are those which are used for general farm purposes, and are composed of the three elements of plant food, namely Nitrogen, available Phosphoric acid and Potash K\*O and are mixed by the world's largest fertilizer manufacturers in the proper proportions, so as to give your soil the proper available plant food to produce a maximum crop. We handle large quantities of the various analyses every year and will ask that you consult us and get the right fertilizer for your specific needs. Prices will be quoted upon application.

NITRATE OF SODA. In its commercial form contains about 15½% of Nitrogen, equal to about 19½% of Ammonia, as the source of Nitrogen or Ammonia, in home mixed fertilizers Nitrate of Soda is the most desirable, particularly for all quick-growing crops, and when early maturity is desired, and when inclement weather is at hand, or frost, Nitrate of Soda will give maturity before the frost really kills.

SULPHATE OF AMMONIA. Used largely in orchards for practically all kinds of fruit; especially valuable for melons and tomatoes, which thrive better in a slightly acid soil. A form of nitrogen which is coming into general use with fruit men and truck growers. It will take the place of Nitrate of Soda to a certain extent, in so far that it is not so quick acting.

SUPER PHOSPHATE. This comes in four analyses, namely 16%, 20%, 24% and 44% and is used in grain crops and others requiring an excessive amount of Phosphoric acid, which is lacking in Michigan soil and can be applied in large amounts with excellent results.

MURIATE OF POTASH. The best form of Potash for fruit and muck vegetable crops. All root crops draw heavily on the soil for Potash, especially potatoes and onions. Most muck soils are lacking in Potash, and celery will grow a much firmer stalk of far better quality when either a high grade fertilizer, high in Potash, or Muriate of Potash is applied in liberal quantities.

STEAMED BONE MEAL. It is low in Nitrogen, high in Phosphoric acid, which is the best way to apply Phosphoric acid to your soil, as bone phosphate gives excellent results on all crops.

PULVERIZED HEN MANURE. Contains double the plant food value of Pulverized Sheep Manure and is sold as cheaply. Hen Manure is collected mainly from unloading cars in which poultry have been shipped and is dried and finely ground so that it can be evenly applied and not burn vegetation.

PULVERIZED SHEEP MANURE. This is collected from the stock yards, heated to kill weed seeds, finely ground, and forms an excellent fertilizer for lawns, golf courses, garden plots, etc.

SHREDDED CATTLE MANURE. Collected from the stock yards and is finely ground, containing a similar amount of plant food as Pulverized Sheep Manure and is exceedingly good for the humus that it adds to the soil.

LIME. Pulverized Agricultural Limestone is not a fertilizer as it is commonly thought, but is a soil sweetener, and every farmer can insure the constant fertility of his soil by using a little care and "feeding" the soil regularly with the elements needed. One of the most common ailments for lack of fertility in farm land is "ACID SOIL", and it is to correct this condition, to "sweeten" or neutralize acid soil that Pulverized Limestone is used; it has brought bumper crops, money-making crops, on farms that otherwise would be practically worthless. Run down fields where you have been unable to grow alfalfa or clover and where moss, sour grass and thistles thrive, need pulverized limestone.

MANCANEES SIUPHATE Recearch shows that manys.

and thisties thrive, need pulverized innestone.

MANGANESE SULPHATE. Research shows that manganese is essential in the manufacture of the green color in plants, by the aid of which the most important processes of plant growth operate and is lacking in most soils. Manganese Sulphate is added to mineral fertilizers to supplement this plant food element and has been found very beneficial in growing crops.

### PLANTER'S GUIDE

Variety	Seed required for 50 ft. of row	Seed required to sow an acre	Seed required to produce a given number of plants	Distance between rows (inches)	Distance apart in row (inches)	Depth of planting (inches)
Asparagus Beans, Bush Beans, Pole Beet Beet, Mangel Broccoli Brussels Sprouts Cabbage Cardoon Carrot Cauliflower Celery Chicory Collards Corn, Pop Corn, Sweet	1/2 oz. 1 lb. 1/2 lb. 1/2 oz. 1/4 oz. 1/2 oz. 1/4 oz. 1/2 oz.	4 lbs. 50 to 60 lbs. 30 to 35 lbs. 6 to 8 lbs. 3 ozs. 3 ozs. 5 ozs. 2½ lbs. 5 ozs. 5 lbs. 5 ozs. 6 to 8 lbs. 10 to 14 lbs.	1 oz. to 700  1 oz. to 5000 1 oz. to 5000 1 oz. to 5000 1 oz. to 5000 1 oz. to 8000 1 oz. to 4500 1 oz. to 4000	14 to 24 24 to 32 40 to 48 14 to 24 18 to 30 20 to 36 20 to 36 24 to 36 20 to 32 16 to 24 24 to 40 20 to 36 24 to 40 34 to 40 34 to 40	3 to 6 2 to 3 6 to 8 1 to 3 2 to 6 16 to 22 16 to 22 14 to 24 20 to 30 1 to 3 20 to 24 4 2 to 3 14 to 18 6 to 8 5 to 6	1 11/2 to 2 11/2 to 2 11/2 to 1 1/2 to 3/4 1/2 1/2 to 1 1/2 1/2 to 1 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/
Corn Salad Cress Cucumber Dill Egg Plant Endive Kale Kohl Rabi Leek Lettuce Melon, Musk Melon, Water Mustard Okra Onion	2 ozs. 1 oz. 1/2 oz. 1/2 oz. 1/2 oz. 1/2 oz. 1/4 oz. 1/4 oz. 1/4 oz. 1/2 oz. 1 oz. 1/2 oz. 1 oz. 1/2 oz.	10 to 12 lbs. 10 lbs. 2 to 3 lbs. 5 lbs. 6 to 8 ozs. 4 to 5 lbs. 4 to 5 lbs. 4 to 5 lbs. 4 lbs. 3 to 4 lbs. 2 to 3 lbs. 4 lbs. 4 lbs. 4 lbs. 4 lbs. 4 lbs. 4 lbs. 5 to 10 lbs. 4 to 5 lbs.	1 oz. to 2000 1 oz. to 4000	14 to 18 12 to 18 48 to 60 20 to 36 24 to 30 18 to 24 24 to 32 14 to 24 12 to 18 70 to 80 90 to 100 14 to 24 24 to 40 18 to 24	3 to 4 2 to 4 36 to 48 4 to 6 18 to 24 8 to 12 18 to 22 4 to 6 2 to 3 4 to 8 48 to 60 72 4 to 6 18 to 24 3 to 4	3/4 1/2 1/2 to 3/4 1/2 3/4 1/2 3/4 3/4 3/4 3/4 3/4 3/4 3/4 3/4 1/2 1 to 2
Onion (for sets) Parsnip Parsley Peas Pepper Pumpkin Radish Rhubarb Rutabaga Sage Salsify Sorrel Spinach Squash, Bush Squash, Vining Sunflower Tomato Tobacco Turnip	1/2 oz.	50 to 80 lbs. 3 to 4 lbs. 3 to 4 lbs. 100 to 180 lbs. 1 to 2 lbs. 3 to 4 lbs. 8 to 10 lbs. 3 lbs. 2 to 4 lbs. 4 to 5 lbs. 7 to 8 lbs. 4 to 5 lbs. 5 to 5 lbs. 5 to 8 lbs. 7 to 8 lbs. 7 to 8 lbs. 2 to 4 ozs. 2 ozs. 2 lbs.	1 oz. to 1000	12 to 14 18 to 24 12 to 20 24 to 36 20 to 30 95 to 110 12 to 18 24 to 42 18 to 24 20 to 24 12 to 22 14 to 18 42 to 48 70 to 90 50 to 70 40 to 60 36 to 48 12 to 20	Not thinned 3 to 4 4 to 6 1 to 2 18 to 20 60 to 80 1 to 2 20 to 24 4 to 7 6 to 10 2 to 3 2 to 3 3 to 5 42 to 48 60 to 90 10 to 12 36 to 40 24 to 36 2 to 4	3/4 3/4 3/4 1 to 2 3/4 3/4 3/4 3/4 3/4 3/4 3/4 1 1/2 1/2 1/2

NUMBER OF PLANTS TO THE ACRE AT GIVEN DISTANCES

Distance apart		Distance apart	No. plants 1	Distance apart	No. plants
12 x 1 in	522,720	24 x 24 in		36 x 36 in	4 840
12 x 3 in		30 x 1 in		42 x 12 in	
12 x 12 in	43,560	30 x 6 in		42 x 24 in	
16 x 1 in		30 x 12 in		42 x 36 in	4 148
18 x 1 in	348,480	30 x 16 in	13.068	48 x 12 in	
18 x 3 in		30 x 20 in		48 x 18 in,	
18 x 12 in	29,040	30 x 24 in		48 x 24 in	5.445
18 x 18 in	19,360	30 x 30 in		48 x 30 in	4.356
20 x 1 in	313,635	36 x 3 in		48 x 36 in	2 630
20 x 20 in	15,681	36 x 12 in		48 x 48 in	
24 x 1 in	261,360	36 x 18 in		60 x 36 in	
24 x 18 in	15,520	36 x 24 in		60 x 48 in	
Approximate number of f	eet of row nor a				2,210
Distance between rows:	18 inches		inches 36 inch	40 1-1	40 : 1
Feet of row:					48 inches
rect of fow!	29010	21758 17-	127 14526	12439	10853

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# 1944 PLEASE USE THIS ORDER SHEET

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Express or Freight Of	fice ( If Di	ifferent ) m P. O. )			.Forward Goods by (Parcel Post, Express, F	Freight or Boat)
AMO	UNT ENC	LOSED	5%	DISCO	LINITS	10%
Money Or	der \$		If Your Order Amounts to	Except on Peas, B		If Your Order
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IF MORE ORDER BLANKS ARE WANTED, WRITE US AND WE WILL SEND THEM. MAIL ORDERS ARE SOLICITED.

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Price

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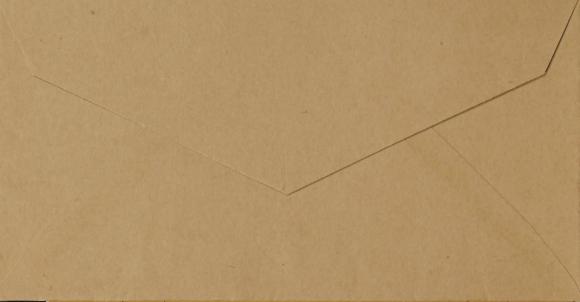
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SCABIOSA (Mourning Bride)